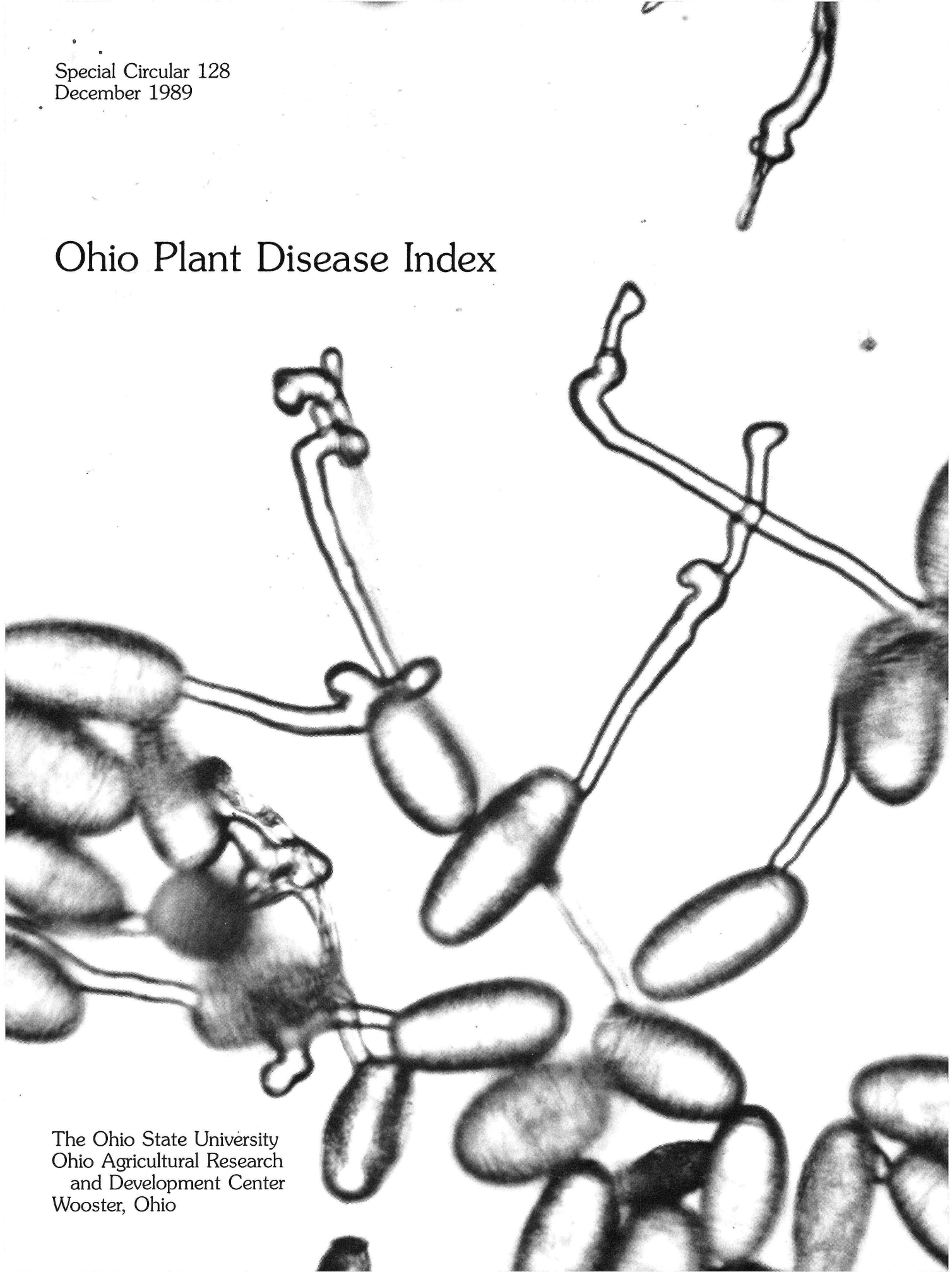


Special Circular 128
December 1989

Ohio Plant Disease Index

The Ohio State University
Ohio Agricultural Research
and Development Center
Wooster, Ohio



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Special Circular 128
December 1989

Ohio Plant Disease Index

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OARDC

Kirklyn M. Kerr
Director

The Ohio State University
Ohio Agricultural Research and Development Center
Wooster, Ohio

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Foreword

The Ohio Plant Disease Index is the first step in developing an authoritative and comprehensive compilation of plant diseases known to occur in the state of Ohio. Prof. C. Wayne Ellett had worked diligently on the preparation of the first edition of the Ohio Plant Disease Index since his retirement as Professor Emeritus in 1981. The magnitude of the task is illustrated by the cataloguing of more than 3,600 entries of recorded diseases on approximately 1,230 host or plant species in 124 families. Prof. Ellett also incorporated a valuable historical account of collectors and their collections to supplement the early plant disease records.

Prof. Ellett has had considerable experience in the diagnosis of Ohio plant diseases, and his scholarly approach in preparing the index received the acclaim and support of the plant pathology faculty at The Ohio State University. This first edition stands as a remarkable and substantial contribution by Prof. Ellett. The index will serve us well as the complete reference for Ohio for many years to come.

Charles R. Curtis, Chairperson
Department of Plant Pathology
June 12, 1989

Acknowledgements

Many individuals have provided encouragement and assistance in the compilation of this index. Without their help an index of this magnitude would have been impossible. It is a pleasure to acknowledge the assistance of the faculty of the Department of Plant Pathology, The Ohio State University. Special thanks are due to Curt Leben, H. A. J. Hoitink, P. E. Lipps, L. J. Herr, L. H. Rhodes, M. A. Ellis, R. C. Rowe, and W. W. Shane for reviewing and providing additional records for certain crop plants. I also thank A. F. Schmitthenner for providing his records of *Pythium* and *Phytophthora* species, R. Louie for virus records on the Gramineae, R. M. Reidel for many of the records of nematodes, S. T. Nameth for records of viruses and making available reports from the Plant and Pest Diagnostic

Clinic, and L. E. Williams and C. R. Curtis for review of portions of the index. I would also like to thank F. H. Berry, Plant Pathologist (retired), USDA Forest Service laboratories, Delaware, Ohio, for records of decay fungi isolated from tree plots in Ohio and P. H. Kaufman, Plant Pathologist, Division of Plant Industry, Ohio Department of Agriculture, for disease records from nurseries in Ohio.

I am greatly indebted to W. W. Shane for his patience and the many hours spent on all the computer-related activities of this endeavor.

The following Ohio State University and OARDC personnel are gratefully acknowledged for their assistance in manuscript preparation: Susan K. Harshe, Ramona Powell, and Bonnie Bing.

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On the Cover:

Germinating conidia of the powdery mildew fungus,
Erysiphe polygoni. From a photomicrograph.

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Ohio Plant Disease Index

C. Wayne Ellett¹

Introduction

This annotated index is a compilation of the recorded and reported diseases and their causes of wild and cultivated plants in Ohio. Each entry includes one or more authorities for listing the disease in Ohio. Literature references providing a description of the pathogen or cause, are included for most entries.

Publication of the Ohio Plant Disease Index does not imply the index is totally complete, but every effort was made to make it as comprehensive as possible. It is not a complete listing of saprophytic fungi reported on plant hosts. Neither is it complete with respect to fungi (especially Hymenomycetes) that occur causing decay or rot of heartwood or sapwood. There are many Ohio collections of these species but the host tree often was not reported. Additional new diseases certainly will be reported each year. As in all compilations of this kind some pathogens may have been misidentified as well as some hosts. In some instances, especially where collections were cited, it was possible to correct errors. All of the collections cited in this index were examined personally by the author.

Pathogen groups or causal agents are listed in the following order—Bacteria; Fungi; Nematodes; Viruses, Viroids, and Mycoplasmas; and Physiological or Abiotic causes. Causal agents within the above groups are listed in alphabetical order. For a few host plants, insect- and mite-caused problems are included where the symptoms resemble a plant disease.

A complete entry for this index includes the following; scientific and common name of the host plant; pathogen (genus and species) or causal agent; older names and alternate state names, where applicable; disease(s) caused; source(s) for the entry in parentheses; and reference(s) to a description of the pathogen or causal agent.

A Brief Historical Review

The first list of fungi from Ohio was published by T. G. Lea in 1849, as a part of a *Catalogue of Plants, Native and Naturalized, Collected in the Vicinity of Cincinnati, Ohio, During the Years 1834-1844*. Twenty to thirty of the 319 fungi in this catalogue would today be considered as plant pathogens; however, at that time fungi were not generally recognized as causing plant disease. The fungi in Lea's list were identified by the Reverend M. J. Berkeley, well known British mycologist of the 19th century. In the 1880's, A.P. Morgan's *Mycologic Flora of the Miami Valley, Ohio* was published, but no parasitic species of fungi were included.

Beginning in the 1880's several persons became active as collectors of parasitic fungi. Frederica Detmers ap-

pointed assistant Botanist in 1899 at the Ohio Agricultural Experiment Station reported on many diseases of fruit and vegetable crops and prepared lists of rust fungi of Ohio plants in the 1890's. A. D. Selby from 1893 to 1923 reported on many Ohio plant diseases and as early as 1893 published a list of powdery mildews. He received the B. Sc. degree from The Ohio State University in 1893 and taught botany at Columbus High School before joining the staff as botanist and chemist at the Ohio Agricultural Experiment Station. From 1904 to 1923 Selby served as Chief, Department of Botany, Ohio Agricultural Experiment Station, Wooster.

The first compilation of plant diseases in Ohio is a 1910 publication by Professor Selby (Ohio Agricultural Experiment Station Bulletin No. 214). The publication by Selby was a revised and expanded treatment of "A Condensed Handbook of the Diseases of Cultivated Plants in Ohio" published in 1900. It was much more than a listing of diseases of Ohio cultivated plants. It was a discussion of diseases in general. At the time of this publication it was reported to be the only general compilation and discussion of plant disease in America (Stover, *Phytopathology* 15:1-10). Selby was a charter member of the American Phytopathological Society and its President in 1911.

In 1891 W. A. Kellerman became Chairman of the newly organized department of Botany & Forestry at Ohio State. He collected extensively, adding many specimens of parasitic fungi to the herbarium of the University. Kellerman and Werner in 1893 prepared a list of Ohio plants for volume 7 of the Report of the Ohio Geological Survey. One thousand species of fungi are included of which about 250 are parasitic.

Frank Lincoln Stevens, a part time graduate student at Ohio State and a teacher at Columbus North High School (1894-1898) collected in central Ohio and published four lists of parasitic fungi. Later after leaving Ohio he published the well known and widely used book, *The Fungi Which Cause Plant Disease*. Edo Claassen collected in Cuyahoga and nearby counties of northern Ohio from 1895 to the early 1920's and published several lists of powdery mildew and rust fungi in the 1890's.

Other collectors of parasitic fungi in Ohio, 1890-1910 and the general locality where they collected are listed. At least some of the collections of these early collectors are in The Ohio State University fungus collections.

W. H. Aiken, Cincinnati, 1897-1910
E. E. Bogue, Ashtabula County, 1890's
Thomas Bonser, Wyandot County, Early 1900's
Moses Craig, Columbus, 1888-1892
F. D. Kelsey, Oberlin, Toledo, 1890's
L. C. Riddle, Columbus, 1895-1905

¹Professor Emeritus, Department of Plant Pathology

C. M. Weed, Columbus, 1895-1898
W. C. Werner, Columbus, Painesville, 1890's
E. M. Wilcox, Columbus, 1890's

Additional information on the early history of collections and collectors of Ohio parasitic fungi can be found in The Ohio Journal of Science 57:236-242 and in *A History of the Department of Plant Pathology, The Ohio State University* on file in The Ohio State University Library and in the University Archives.

Scientific and Common Names of Host Plants

Plant families are presented in alphabetical order, as are plant genera and species within each family. The following sources were consulted for names of the host plants.

Hortus Third. 1976. Macmillan Publishing Co., Inc., New York. 1290 p.

Braun, E. L. 1967. The Monocotyledoneae: Cat-tails to Orchids. With Gramineae by C. G. Weishaupt. The Ohio State University Press. 464 p.

Cusick, A. W. and G. M. Silberhorn. 1977. The Vascular Plants of Unglaciaded Ohio. Ohio Biological Survey, New Series Vol. 5, No. 4. The Ohio State University. 157 p.

Gleason, H. A. 1952. Illustrated Flora of the Northeastern United States and Canada. Vol. 1-3. New York Botanical Garden.

Weishaupt, C. G. 1971. Vascular Plants of Ohio, 3rd ed. Kendall/Hunt Publishing Co., Dubuque, IA. 292 p.

Names of Pathogens

An attempt was made to use names currently accepted for fungi and bacteria since there have been many recent changes with species transferred to new or existing genera. In this index, synonyms or older names are listed in parentheses. Also, the alternate state (perfect or teleomorph, imperfect or anamorph) is often included. A list of references at the end of the *Introduction* and under *References and Literature Cited* should be consulted for nomenclature and for descriptions of selected genera and groups of fungi.

The following sources were consulted for bacterial pathogen names in the genera *Pseudomonas* and *Xanthomonas*.

- 1) Dye, D. W. et al. 1980. Review of Plant Pathology 59:153-168.
- 2) Fahy, P. C. and G. J. Persley (eds.). 1983. Plant Bacterial Diseases—A Diagnostic Guide. Academic Press. 393 p.

For current nomenclature of *Corynebacterium* species see Annu. Rev. Phytopathol. 24:115-140 (1986). For *Erwinia* species—see Fahy and Persley 1983.

Most of the research in Ohio on nematodes causing plant disease has been done by J. D. Wilson and R. M. Riedel

and their students. Most nematode entries in this index were provided by Riedel. Results of a nematode survey by J. D. Wilson and J. T. Walker in 1959-60 were published in Special Circular 97 of the Ohio Agricultural Experiment Station. The Wilson and Walker study reports nineteen genera of stylet-bearing nematodes associated with 57 different kinds of plants. Their reports were not incorporated into this index since the nematodes were isolated from soil and injury to the associated plants was not assessed or observed.

Sources of Entries in this Index

One or more sources for the listing are in parentheses following the name of the disease. Sources include reports in the literature; records or reports from the original Plant Disease Clinic (1970-1984) or since 1985 from the Plant Pest and Diagnostic Clinic of The Ohio State University; collections in the OSU fungus collections; collections examined in herbaria of Oberlin College, Miami University, University of Cincinnati, and Ohio collections of powdery mildews in the National Fungus Collections, Beltsville, MD. Also cited as sources are persons formerly associated with the Department of Plant Pathology, The Ohio State University, as well as current staff. Where others are cited their affiliation is indicated. When the source of the listing is from the literature the citation is abbreviated but sufficient for verification, as listed or by referring to the *List of References* at the end of the Index. Abbreviations are used to indicate listing sources. See p. v.

References to the Literature Describing the Pathogen or Causal Agent

An attempt was made to cite a publication that provided an authoritative description of the pathogen. For some large groups of fungi (rusts, smuts, etc.) and for genera listed repeatedly (e.g. *Fusarium*, *Cercospora*), a reference is not included with each individual entry. The user should refer to publications listed below for descriptions and information on these genera and groups of pathogens. Although the citations were selected primarily for descriptions of the pathogens, some references were included that provide detailed information about other aspects of the disease.

Botrytis

Coley-Smith, J. R. et al. 1980. The Biology of *Botrytis*. Academic Press, New York. 318 p.

Jarvis, W. R. 1977. *Botryotinia* and *Botrytis* species: taxonomy, physiology, and pathogenicity. A guide to the literature. Can. Dept. Agr. Monograph 15:1-195.

Cercospora

Chupp, Charles. 1953. A Monograph of the Fungus Genus *Cercospora*. Privately published. 667 p.

Pollack, F. G. 1987. An annotated compilation of *Cercospora* names. Mycologia Memoir 12. 212 p.

Colletotrichum, Gloeosporium

- Arx, J. A. von. 1970. A revision of fungi classified as *Gloeosporium*. *Bibl. Mycol.* 24:1-203. (2nd ed. revised and translated from German). J. Cramer, Publ.

Fusarium

- Booth, C. 1971. The Genus *Fusarium*. Commonwealth Mycological Institute, Kew, Surrey, England. 231 p.
- Nelson, P. E., T. A. Toussoun, and R. J. Cook, (eds.) 1981. *Fusarium: Diseases, Biology, and Taxonomy*. Pennsylvania State University Press. 457 p.
- Nelson, P. E., T. A. Toussoun, and W. F. O. Marasas. 1983. *Fusarium Species: An Illustrated Manual for Identification*. Pennsylvania State University Press 193 p.

Phytophthora

- Erwin, D. C. et al., (eds.) 1983. *Phytophthora: Its Biology, Taxonomy, Ecology, and Pathology*. Amer. Phytopathological Society, St. Paul, MN. 392 p. Reprinted in 1988.
- Ribeiro, O. K. 1978. A Source Book on the Genus *Phytophthora*. J. Cramer, Vaduz. 417 p.
- Waterhouse, G. M. 1963. Key to the species of *Phytophthora* DeBary. *Mycol. Paper No. 92*. CAB International Mycological Institute, Kew, Surrey. 22 p.
- Waterhouse, G. M. 1970. 2nd Ed. The genus *Phytophthora* DeBary. *Mycological Paper No. 122*. CAB International Mycological Institute, Kew, Surrey. 59 p.

Pythium

- Middleton, J. T. 1943. The taxonomy, host range, and geographic distribution of the genus *Pythium*. *Mem. Torrey Bot. Club* 20:1-171.
- Plaats-Niterink, A. J. van der. 1981. Monograph of the genus *Pythium*. *Stud. Mycol.* 21:1-242.
- Waterhouse, G. M. 1967. Key to *Pythium* Pringsheim. *Mycol. Paper No. 109*. CAB International Mycological Institute, Kew, Surrey. 15 p.
- Waterhouse, G. M. 1968. The genus *Pythium* Pringsheim. *Mycol. Paper No. 110*. CAB International Mycological Institute. 71 p.

Rhizoctonia

- Parmeter, J. R., Jr. (ed.) 1970. *Rhizoctonia solani: Biology and Pathology*. Univ. Calif. Press. 255 p.

Verticillium*

- Gams, W. and A. van Zaayen. 1982. Contribution to the taxonomy and pathogenicity of fungicolous *Verticillium* species. I. Taxonomy. *Neth. J. Plant Pathol.* 88:57-88.

Isaac, I. 1967. Speciation in *Verticillium*. *Annu. Rev. Phytopathology* 5:201-222.

Pegg, G. F. 1974. *Verticillium* diseases. *Rev. Plant Pathology* 53:157-182.

*The causal organism of *Verticillium* wilt was identified in numerous older records as *Verticillium albo-atrum*—or a distinction between *V. albo-atrum* and *V. dahliae* was not made. It is likely that many reports of *V. albo-atrum* in this index are *V. dahliae*.

Downy Mildews

Spencer, D. M. (ed.) 1981. *The Downy Mildews*. Academic Press, New York. 636 p.

Powdery Mildews

- Braun, Uwe. 1987. A monograph of the Erysiphales (powdery mildews). *Nova Hedwigia* 89 (700 p.).
- Salmon, E. S. 1900. A monograph of the Erysiphaceae. *Mem. Torrey Bot. Club* 9:1-292.
- Spencer, D. M. (ed.) 1978. *The Powdery Mildews*. Academic Press, New York. 565 p.

Rust Fungi

- Arthur, J. C. 1934. *Manual of the Rusts in the United States and Canada*. Purdue Research Foundation, Lafayette, IN. 438 p. Supplement in 1962 by G. B. Cummins. Hafner Publishing. 24 p.
- Cummins, G. B. 1971. *The Rust Fungi of Cereals, Grasses and Bamboos*. Springer-Verlag, New York. 570 p.
- Cummins, G. B. 1978. *Rust Fungi on Legumes and Composites in North America*. Univ. Arizona Press, Tuscon. 424 p.
- Cummins, G. B. and Y. Hiratsuka. 1983. Rev. Ed. *Illustrated Genera of Rust Fungi*. Amer. Phytopathological Society, St. Paul MN. 152 p.

Smut Fungi

Fischer, G.W. 1953. *Manual of North America Smut Fungi*, Ronald Press, New York. 343 p.

Nematodes

Mai, W. F. and H. H. Lyon. 1975. 4th Rev. Ed. *Pictorial Key to Genera of Plant Parasitic Nematodes*. Cornell University Press, Ithaca, NY. 219 p.

Some Additional References Helpful for Identification of Fungi Causing Plant Disease

- Ainsworth, G. C. et al., (eds.) 1973. *The Fungi. An Advanced Treatise. Vol. IV A. A Taxonomic Review with Keys: Ascomycetes and Fungi Imperfecti*. Academic Press, New York. 621 p.
- Ainsworth, G. C. et al., (eds.) 1973. *The Fungi. An Advanced Treatise. Vol. IV B. A Taxonomic Review with Keys: Basidiomycetes and Lower Fungi*. Academic Press, New York. 504 p.
- American Phytopathological Society. 1973-88. A series of compendia of diseases of economic

- plants. To date compendia of diseases of the following plants grown in Ohio have been published: alfalfa, barley, beets, corn, elm, grape, ornamental foliage plants, pea, potato, rhododendron and azalea, rose, sorghum, soybean, strawberry, sweet potato, turfgrass, and wheat. APS Press, St. Paul, MN.
- Commonwealth Mycological Institute. 1964-1987. Descriptions of Pathogenic Fungi and Bacteria. Numbers 1-920. CAB International Mycological Institute, Kew, Surrey, England. (Abbreviated in the Index—CMI 1, 2, etc.)
- Connors, I. L. 1967. An Annotated Index of Plant Diseases in Canada. Research Branch, Canada Dept. Agr. Publ. 1251. 381 p.
- Domsch, K. H. et al. 1980. Compendium of Soil Fungi Vol. 1 and 2. Academic Press, New York. 859 p. and 405 p.
- Ellis, M. B. 1971. Dematiaceous Hyphomycetes. Commonwealth Mycological Institute, Kew Surrey, England. 608 p.
- Ellis, M. B. 1976. More Dematiaceous Hyphomycetes. Commonwealth Mycological Institute. Kew, Surrey, England. 507 p.
- Hawksworth, D. L. et al. 1983. Ainsworth & Bisby's Dictionary of Fungi. 7th ed. Commonwealth Mycological Institute. Kew, Surrey, England. 445 p.
- Rossman, Amy Y., Mary E. Palm, and Linda J. Spielman. 1987. A Literature Guide for the Identification of Plant Pathogenic Fungi. The American Phytopathological Society, St. Paul, MN. 252 p.
- Sivanesan, A. 1987. Graminicolous Species of *Bipolaris*, *Curvularia*, *Drechslera*, *Exserohilum* and Their Teleomorphs. Mycol. Paper No. 158. CAB International Mycol. Inst.
- Sutton, B. C. 1980. The Coelomycetes. Fungi Imperfecti with Pycnidia, Acervuli, and Stromata. Commonwealth Mycological Institute, Kew, Surrey, England. 656 p.
- United States Department of Agriculture. 1960. Index of Plant Diseases in the United States. Agriculture Handbook No. 165. 531 p.

Example of an Entry in the Index

Zea mays L. Maize, Indian Corn

Exserohilum turcicum (Pass.)Leonard and Suggs [*Helminthosporium turcicum* Pass.; Perf. St. *Setosphaeria turcica* (Luttrell) Leonard and Suggs]—Northern corn leaf blight (OS; Phytopath. 33:407) Phytopath. 48:281; Mycotaxon 17:1-86; CMI 304.

This means the fungus *Exserohilum turcicum* causes northern leaf blight of corn and was reported in Ohio in Phytopathology 33:407, specimens are in the OSU fungus collections and descriptions of the fungus can be found in Phytopathology 48:281, Mycotaxon 17:1-186, and Descriptions of Pathogenic Fungi and Bacteria No. 304, Commonwealth Mycological Institute. Also *Helminthosporium turcicum* is an older name and the perfect state or teleomorph is *Setosphaeria turcica*.

Abbreviations Used in the Index

C—Plant Disease Clinic or Plant and Pest Diagnostic Clinic, The Ohio State University	AFS—A. F. Schmitthenner	LJH—L. J. Herr
CINC—Herbarium, University of Cincinnati, Cincinnati, OH	CCA—C. C. Allison	MAE—M. A. Ellis
MU—Herbarium, Miami University, Oxford, OH	CCP—C. C. Powell	NJT—Nancy J. Taylor
NFC—National Fungus Collections, Beltsville, MD	CL—Curt Leben	PEL—P. E. Lipps
OAES—Ohio Agricultural Experiment Station, Wooster, OH	CWE—C. W. Ellett	POL—P. O. Larsen
OARDC—Ohio Agricultural Research and Development Center	DTG—D. T. Gordon	RCR—R. C. Rowe
OC—Herbarium, Oberlin College, Oberlin, OH	GJB—G. J. Bart	REH—R. E. Hite
OCES—Ohio Cooperative Extension Service	HJH—H. A. J. Hoitink	RL —R. Louie
ODA—Ohio Department of Agriculture, Reynoldsburg, OH	JDW—J. D. Wilson	RMR—R. M. Riedel
ODNR—Ohio Department of Natural Resources, Division of Forestry	LEW—L. E. Williams	STN—S. T. Nameth
OS—Ohio State University Fungus Collections, Depart- ment of Plant Pathology	LHR—L. H. Rhodes	WWS—W. W. Shane
PDI—USDA Agriculture Handbook 165. Index of Plant Diseases in the United States.	BJ—B. Joyner, ChemLawn Services Corp., Columbus, OH	
	CES—C. E. Seliskar, NE Forest Expt. Sta., Delaware, OH	
	FB—F. H. Berry, USDA Forest Service, Delaware, OH	
	MJP—M. J. Powell, Miami Univ., Oxford, OH	
	PK—P. Kaufman, Ohio Dept. Agr., Reynoldsburg, OH	
	WBC—W. B. Cooke, Mycologist, Cincinnati, OH	

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Host Plant Index

ACANTHACEAE

Fittonia verschaaffeltii (Lem.) Coem. Silver-nerve

FUNGI

Rhizoctonia solani Kuehn—Foliar blight (Plant Dis. Rptr. 37:373)

Justicia americana (L.) Vahl. Water-willow

FUNGI

Cercospora diantherae Ell. & Kell.—Leaf spot (OS)

Ruellia strepens L.

FUNGI

Puccinia lateripes Berk. & Rav.—Rust (OS)

ACERACEAE

Acer buergerianum Miq. Trident maple

FUNGI

Phyllosticta minima (Berk. & Curt.) Ell. & Ev.—Leaf spot (CWE)
Fungi Canadenses No. 277; Plant Dis. Rptr. 38:678

A. campestre L. Hedge maple

FUNGI

Phyllosticta minima (Berk. & Curt.) Ell. & Ev.—Leaf spot (CWE) Ibid.
Verticillium albo-atrum Reinke & Berth.—Wilt (C) Rev. Plant Pathol.
53:157; CMI 255, 256

A. ginnala Maxim. Amur maple

FUNGI

Phyllosticta minima (Berk. & Curt.) Ell. & Ev.—Leaf spot (CWE)
Fungi Canadenses No. 277; Plant Dis. Rptr. 38:678

A. griseum (Franch.) Pax. Paperbark maple

FUNGI

Phyllosticta minima (Berk. & Curt.) Ell. & Ev.—Leaf spot (CWE) Ibid.

A. negundo L. Box-elder

FUNGI

Cristulariella moricola (Hino) Redhead (C. *pyramidalis* Waterman & Marshall; Perf. St. *Grovesinia pyramidalis* M. Cline, Crane & S. Cline)—Leaf spot (CWE) Mycologia 75:988 and 71:722
Nectria cinnabarina (Tode) Fr. (Imp. St. *Tubercularia vulgaris* Tode)—On branches; ? dieback (Bi Month. Bull. OAES 1:294) CMI Mycol. Paper No. 73; CMI 531
Phyllosticta negundinis Sacc. & Speg.—Leaf spot (CWE) Fungi Canadenses No. 277
Septoria sp.—Leaf spot (C)

INSECTS, MITES

Eriophyes negundi Hodgkiss—Leaf gall; erineum (Keifer et al 1982)

A. palmatum Thunb. Japanese maple

FUNGI

Phyllosticta minima (Berk. & Curt.) Ell. & Ev.—Leaf spot (CWE) Plant Dis. Rptr. 38:678
Verticillium albo-atrum Reinke & Berth.—Wilt (C) Rev. Plant Pathol. 53:157; Neth. J. Plant Pathol. 88:57; CMI 255, 256

A. platanoides L. Norway maple

FUNGI

Cristulariella moricola (Hino) Redhead—Leaf spot (CWE) See *A. negundo*
Kabatella apocrypta (Ell. & Ev.) v. Arx (*Gloeosporium a.* Ell. & Ev.)—Anthracnose leaf blight (CWE, C) Arx 1970
Nectria cinnabarina (Tode) Fr. (Imp. St. *Tubercularia vulgaris* Tode)—On branches, ? dieback (PDI) CMI Mycol. Paper No. 73

Phloeospora aceris (Lib.) Sacc. [*Septoria aceris* (Lib.) Berk. & Br.]—Leaf spot (CWE) Ellis & Ellis 1985

Phyllosticta minima (Berk. & Curt.) Ell. & Ev.—Leaf spot (CWE) Plant Dis. Rptr. 38:678; Fungi Canadenses No. 277

Rhytisma acerinum (Pers.) Fr.—Tar spot (OS) Can. J. Botany 49:1267; CMI 791 (May not be this species on Norway maple. See Plant Dis. 71:65)

Stegonosporium ovatum (Pers. ex Merat) Hughes—On branches (CWE) Fungi Canadenses No. 103; CMI mycol. Paper No. 145.

Verticillium albo-atrum Reinke & Berth. (C, CWE) Rev. Plant Pathol. 53:157; CMI 255, 256

A. pseudoplatanus L. Sycamore maple

FUNGI

Nectria cinnabarina (Tode) Fr. (Imp. St. *Tubercularia vulgaris* Tode)—Branch dieback (CWE) CMI Mycol. Paper No. 73; CMI 531

A. rubrum L. Red maple

FUNGI

Cristulariella moricola (Hino) Redhead (Perf. St. *Grovesinia pyramidalis* M. Cline, Crane, & S. Cline)—Zonate leaf spot (ODA) Mycologia 75:988

Fomes ignarius (L. ex Fr.) Kickx (*Phellinus*)—Heart rot (PDI) Overholts 1953; CMI 194

F. connatus (Weinm.) Gill. [*Oxyporus populinus* (Schum.) Donk] Wood rot (PDI) Overholts 1953

Hericium erinaceus (Bull. ex Fr.) Pers.—White heart rot (FB) Mich. Bot. 12:177; Miller 1972

Kabatella apocrypta (Ell. & Ev.) v. Arx (*Gloeosporium a.*) Anthracnose leaf blight (CWE) Ellis & Ellis 1985

Phloeospora aceris (Lib.) Sacc. [*Septoria aceris* (Lib.) Berk. & Br.]—Leaf spot (CWE) Ellis & Ellis 1985

Pholiota adiposa (Fr.) Kummer—Heartwood rot (FB) (Recent taxonomic studies indicate this to be another species)

Phyllosticta minima (Berk. & Curt.) Ell. & Ev.—Leaf spot (OS) Fungi Canadenses No. 277; Plant Dis. Rptr. 38:678

Polyporus delectans Pk. (*Spongiopellis*)—Wood rot (FB) Overholts 1953

P. glomeratus Pk. (*Inonotus g.*)—White spongy heart rot (PDI) Ibid.

P. sulfureus (Bull.) Fr. [*Laetiporus sulfureus* (Bull. ex Fr.) Murr.]—Trunk and butt rot (FB) Overholts 1953; Miller 1972

P. tulipiferae (Schw.) Overh. [*Irpex lacteus* (Fr.) Fr.]—White spongy rot (FB) Overholts 1953

Rhytisma acerinum (Pers. ex Fr.) Fr.—Tar spot (OS) Can. J. Bot. 49:1267; CMI 791

Schizophyllum commune Fr.—White spongy rot (PDI) Miller 1972; Mycologia 53:575

Stegonosporium ovatum (Pers. ex Merat) Hughes (CWE) Fungi Canadenses No. 103

Uncinula circinata Cke. & Pk.—Powdery mildew (CWE, OS) Ohio J. Sci. 66:570

Ustilina vulgaris Tul. [*Hypoxylon deustum* (Hoff.) Grev.]—Wood rot (FB) J. Forestry 38:474; CMI 360

Verticillium albo-atrum Reinke & Berth.—Wilt (C) Rev. Plant Pathol. 53:157; Neth. J. Plant Pathol. 88:57; CMI 255, 256

INSECTS, MITES

Eriophid mites—Erineum; proliferation of epidermal cells, in patches, and often pigmented (CWE) Johnson & Lyon 1976; USDA Agr. Handbook 573

Cecidomyid fly—Leaf spot gall (CWE) Johnson & Lyon 1976. Often mistaken for a fungal leaf spot

ABIOTIC

Manganese deficiency—Chlorosis (E.M. Smith, Proceed. Symposium on systemic chemical treatments in tree culture. Mich. St. Univ. 1979) Graft incompatibility—Decline, dieback (CWE)

A. saccharinum L. Silver maple

FUNGI

Cytospora sp.—Die-back and canker-following injury or environmental stress (CWE)

Hericium erinaceus (Bull. ex Fr.) Pers.—White heart rot (CWE)

Phyllosticta minima (Berk. & Curt.) Ell. & Ev.—Leaf spot (OS) Fungi Canadenses No. 277
Rhytisma acerinum (Pers.) Fr.—Tar spot (OS) Can. J. Botany 49:1267; CMI 791
Stegonosporium ovatum (Pers. ex Merat) Hughes—On branches, mostly saprophytic (CWE) Fungi Canadenses No. 103; See CMI Mycol. Paper 145.
Uncinula circinata Cke. & Pk.—Powdery mildew (OS, CWE)
Verticillium albo-atrum Reinke & Berth.—Wilt (OAES Bull. 630) Rev. Plant Pathol. 53:157; CMI 255, 256

INSECTS, MITES

Eriophyid mites—Erineum; proliferation of epidermal cells, in patches (CWE) USDA Agr. Handbook 573; Johnson and Lyon 1976
 Bladder gall mite (*Vasates* sp.)—Leaf gall (CWE) USDA Agr. Handbook 573

ABIOTIC

Manganese deficiency—Chlorosis (E.M. Smith, Proceedings symposium on systemic chemical treatments in tree culture. Mich. St. Univ. 1979)

A. saccharum Marsh. Sugar maple

FUNGI

Armillaria mellea (Vahl. ex Fr.) Kummer—Root and butt rot (PDI) Miller 1972; CMI 321
Cristulariella moricola Hino & Redhead—Leaf spot (CWE) See *Acer negundo*
Daedalea confragosa (Bolt.) Fr.—Wound rot (PDI) Overholts 1953
D. unicolor (Bull.) Fr.—Wood rot (PDI) Ibid.
Fomes fomentarius (Fr. ex Fr.) Kickx—Decay (PDI) Ibid.
Ganoderma applanatum (Pers. ex Wallr.) Pat.—Wood rot (FB) Miller 1972; CMI 443
Gloeosporium sp.—Small leaf spot, especially on black sugar maple (CWE)
Kabatella apocrypta (Ell. & Ev.) Arx (*Gloeosporium a.* Ell. & Ev.)—Anthracnose leaf blight (CWE, OS) Arx 1970
Oxyporus populinus (Schum. ex Fr.) Donk [*Fomes connatus* (Weinm.) Gill.]—Heart or butt rot (PDI) Overholts 1953
Phellinus ignarius (L. ex Fr.) Quelet (*Fomes*)—White heart rot (PDI) Ibid.
Phloeospora aceris (Lib.) Sacc. [*Septoria aceris* (Lib.) Berk. & Br.]—Leaf spot (CWE) Ellis & Ellis 1985
Phyllosticta minima (Berk. & Curt.) Ell. & Ev.—Leaf spot (OS) Fungi Canadenses No. 277
Polyporus glomeratus Pk. (*Inonotus*)—White spongy heart rot (PDI) Overholts 1953
P. squamosus (Micheli) Fr.—Wood rot (PDI) Ibid.
P. sulfureus (Bull.) Fr. [*Laetiporus sulfureus* (Bull.) Murr.] Trunk and butt rot (PDI) Ibid; Miller 1972
Rhytisma acerinum (Pers.) Fr.—Tar spot (PDI) Can. J. Botany 49:1267; CMI 791
R. punctatum (Pers.) Fr.—Speckled tar spot (OS) Ibid.
Steccherinum septentrionale (Fr.) Banker (*Climacodon*)—White spongy wood rot (PDI) Miller 1972; Coker & Beers 1951
Taphrina sacchari Jenkins—Leaf blister (J. Wash. Acad. Sci. 28:354) Mix 1949
Uncinula circinata Cke. & Pk.—Powdery mildew (OS; Ohio J. Sci. 66:570)
Verticillium albo-atrum Reinke & Berth.—Wilt (OS, C) Rev. Plant Pathol. 53:157; CMI 255, 256

A. tartaricum L. Tartarian maple

FUNGI

Phyllosticta minima (Berk. & Curt.) Ell. & Ev.—Leaf spot (CWE) Fungi Canadenses No. 277

AGAVACEAE

General reference—Compendium of Ornamental Foliage Plant Diseases, 1987. American Phytopathological Society

Cordyline terminalis (L.) Kunth. (Dracaena t.) Dracaena

FUNGI

Phyllosticta dracaenae P. Henn.—Leaf spot (PDI)

Dracaena sp. Dracaena

BACTERIA

Erwinia sp.—Soft rot (C)

FUNGI

Colletotrichum gloeosporioides Penz.—Anthracnose leaf blight (CWE) Arx 1970; CMI 315

Phyllosticta sp.—Leaf spot (CWE)

ABIOTIC

Fluoride toxicity—Marginal necrosis of leaves

D. surculosa Lindl. Spotted dracaena

FUNGI

Colletotrichum gloeosporioides Penz.—Anthracnose leaf blight (CWE) Arx 1970; CMI 315

Sansevieria trifasciata Prain. Snake plant

FUNGI

Colletotrichum gloeosporioides Penz.—Anthracnose leaf spot (CWE) Arx 1970; CMI 315

Fusarium sp.—Leaf spot (CWE)

Yucca filamentosa L. Adams-needle

FUNGI

Coniothyrium concentricum (Desm.) Sacc. (Perf. St. *Leptosphaeria*)—Leaf spot (OS) Phytopath. 57:234

ALISMATACEAE

Echinodorus cordifolius (L.) Griseb. Bur-head

FUNGI

Burrillia echinodori Clint.—Leaf smut (OS, CWE) Fischer 1953

Sagittaria latifolia Willd. Arrow-head

FUNGI

Cercospora sagittariae Ell. & Kell.—Leaf spot (OS)
Doassansia sagittariae (Westend.) Fisch.—Leaf smut (OC)

S. sagittifolia L.

FUNGI

Doassansia sagittariae (Westend.) Fisch.—Leaf smut (Fischer 1953)

AMARANTHACEAE

Amaranthus albus L.

FUNGI

Albugo bliti (Biv.-Bern.) Kuntze—White blister (OS) Sydowia 9:339

A. hybridus L. Green amaranth

FUNGI

Albugo bliti (Biv.-Bern.) Kuntze—White blister (CWE) Ibid.

A. retroflexus L. Rough pigweed

FUNGI

Albugo bliti (Biv.-Bern.) Kuntze—White blister (OS) Ibid.
Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis, OSU 1977)

A. spinosus L. Spiny amaranth

FUNGI

Albugo bliti (Biv.-Bern.) Kuntze—White blister (OSU Vascular Plant Herbarium)

***Celosia cristata* L. Cockscomb, celosia**

FUNGI

Cercospora celosiae Syd.—Leaf spot (CWE)

Pythium ultimum Trow.—Damping-off (AFS)

Rhizoctonia solani Kuehn—Damping-off (Stephens, M.Sc. Thesis, OSU 1977)

NEMATODES

Meloidogyne sp.—Root knot (PDI)

***Gomphrena globosa* L. Globe amaranth**

FUNGI

Rhizoctonia solani Kuehn—Seedling blight (Stephens, M.Sc. Thesis, OSU 1977)

AMARYLLIDACEAE

***Amaryllis* sp. Amaryllis**

FUNGI

Stagonospora curtisii (Berk.) Sacc.—Leaf scorch (PDI) Grove 1935; Phytopath. 23:770

VIRUS

?Virus—Mosaic (CWE)

***Narcissus* sp. Narcissus, daffodil**

FUNGI

Fusarium oxysporum Schlecht.—Basal rot, bulb rot (CWE) Strider 1985

Rhizopus stolonifer (Ehr. ex Fr.) Lind.—Soft rot (PDI)

NEMATODES

Pratylenchus pratensis (DeMan) Filip.—Lesion nematode (PDI) Questionable report

ANACARDIACEAE

***Cotinus coggyria* Scop. Smoketree**

FUNGI

Verticillium albo-atrum Reinke & Berth.—Wilt (C) CMI 255, 256

***Rhus aromatica* Ait. Fragrant sumac**

FUNGI

Discohainesia oenotherae (Cke. & Ell.) Nannf. [Imp. St. *Hainesia lythri* (Desm.) v. Hohn.]—Leaf spot (CWE) Arx 1970

Verticillium albo-atrum Reinke & Berth.—Wilt (ODA) CMI 255, 256

***R. copallinum* L. Dwarf sumac**

FUNGI

Taphrina purpurascens (Ell. & Ev.) Robinson—Leaf curl (Plant Dis. Rptr. 25:191) Mix 1949

***R. glabra* L. Smooth sumac**

FUNGI

Cercospora rhoina Cke. & Ell.—Leaf spot (OS)

Discohainesia oenotherae (Cke. & Ell.) Nannf. [Imp. St. *Hainesia lythri* (Desm.) v. Hohn.]—Leaf spot (CWE) Arx 1970

Sphaerotheca macularis (Wallr.) Lind.—Powdery mildew (5th Ann. Rpt. Ohio Acad. Sci.)

***R. radicans* L. Poison ivy**

FUNGI

Cylindrosporium irregulare (Pk.) Dearn. (*Septoria irregularis* Pk.)—Leaf spot (OS) Bot. Gaz. 5:34

Pileolaria brevipes Berk. & Rav.—Rust (OS)

INSECTS, MITES

Eriophyid mite (*Aculops*)—Wart-like galls, puckered leaves (Keifer et al 1982)

***R. typhina* L. Staghorn sumac**

FUNGI

Sphaerotheca macularis (Wallr.) Lind.—Powdery mildew (OS)

***R. vernix* L. Poison sumac**

INSECTS, MITES

Eriophyid mite—Wart-like galls (Keifer et al, 1982)

ANNONACEAE

***Asimina triloba* (L.) Dun. Pawpaw**

FUNGI

Cercospora asiminae Ell. & Kell.—[*Mycocentrospora asiminae* (Ell. & Kell.) Deighton]—Leaf spot (OC)

Phloeospora asiminae Ell. & Morg.—Leaf spot (PDI)

Phyllosticta asiminae Ell. & Kell.—Leaf spot (OS)

APOCYNACEAE

***Apocynum cannabinum* L. Indian hemp**

FUNGI

Puccinia smilacis Schw.—Rust (OS)

Septoria littorea Sacc.—Leaf spot (OS)

***A. sibiricum* Jacq. Prairie dogbane**

FUNGI

Septoria littorea Sacc.—Leaf spot (OS)

***Catharanthus roseus* (L.) G. Don Madagascar periwinkle**

FUNGI

Botrytis cinerea Pers.—Flower, stem and leaf blight (CWE) CMI 431
Pythium debaryanum Hesse—Damping-off (AFS) Not now considered a valid species. See Plaats-Niterink 1981

P. ultimum Trow—Damping-off (AFS)

Rhizoctonia solani Kuehn—Damping off (Stephens, Ph.D. Dissertat. OSU 1978) Phytopath. 66:700

Thielaviopsis basicola (Berk. & Br.) Ferr.—Root rot (CCP) CMI 170

NEMATODES

Meloidogyne sp. Root knot (PDI)

***Vinca major* L. Bigleaf periwinkle**

NEMATODES

Meloidogyne sp.—Root knot (PDI)

***V. minor* L. Periwinkle**

FUNGI

Phoma exigua Desm.—Stem canker, dieback (C, CWE) Sutton 1980; Phytopath. 61:959

Rhizoctonia solani Kuehn—Root and stem rot (C)

FUNGI

Meloidogyne hapla Chitwood—Root knot (C)

V. rosea*—See *Catharanthus roseus

AQUIFOLIACEAE

Ilex cornuta Lindl. & Paxt. Chinese holly

INSECTS, MITES

Phytomyza sp.—Leaf mining and blotch (CWE) Insect damage often mistaken for disease. Johnson & Lyon 1976

I. crenata Thunb. Japanese holly

Unidentified root problems and winter injury

I. glabra (L.) A. Gray Inkberry

FUNGI

Cercospora ilicis Ellis —Leaf spot (C)

I. x meserveae S. Y. Hu Meserve holly

FUNGI

Thielaviopsis basicola—Root rot (C, NJT)

I. opaca Ait. American holly

INSECTS, MITES

Phytomyza sp.—Leaf mining and blotch (CWE) Insect damage often mistaken for disease. Johnson & Lyon 1976

I. verticillata (L.) Gray Winterberry

FUNGI

Rhytisma concavum Ell. & Kell.—Tar spot (OS) J. Mycol. 8:51

Nemopanthus mucronatus (L.) Trel. Mountain holly

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OC)

ARACEAE

(See American Phytopathological Society Compendium of Ornamental Foliage Plant Diseases, 1987)

Acorus calamus L. Sweet-flag

FUNGI

Uromyces sparaganii Cke. & Pk.—Rust (7th Ann. Rpt. Ohio Acad. Sci.)
See Connors 1967

Aglaonema modestum Schott ex Engl. Chinese evergreen

BACTERIA

Erwinia sp.—Soft rot (C)

Arisaema dracontium (L.) Schott Green dragon

FUNGI

Uromyces ari-triphylli (Schw.) Seeler—Rust (OS)

A. triphyllum (L.) Schott Jack-in-the-pulpit

FUNGI

Uromyces ari-triphylli (Schw.) Seeler—Rust (OS)

Dieffenbachia amoena Bull. Dumb-cane

BACTERIA

Erwinia sp.—Soft rot (CWE)

FUNGI

Colletotrichum gloeosporioides Penz.—Anthracnose leaf blight (CWE)
Arx 1970

D. maculata (Lodd.) G. Don Spotted dieffenbachia

FUNGI

Colletotrichum gloeosporioides Penz.—Anthracnose leaf blight (CWE)
Arx 1970

Epipremnum aureum (Linden & Andre) Bunt. (*Pothos aureus*, *Scindapsis aureus*) Pothos

FUNGI

Rhizoctonia solani Kuehn—Root rot (C)

Monstera deliciosa Liebm. Cut-leaf philodendron

FUNGI

Gloeosporium sp.—Leaf spot (C)

Rhizoctonia solani Kuehn—Foliage blight, root rot (C)

Peltandra virginica (L.) Schott Arrow-arum

FUNGI

Cercospora callae Pk. & G.W. Clint.—Leaf spot (OC)

Uromyces ari-triphylli (Schw.) Seeler—Rust (CWE)

Philodendron sp.

FUNGI

Sclerotium rolfsii Sacc. (Perf. St. *Athelia*)—Southern blight (C) On plants originating from southern propagators. N. Car. Agr. Exp. Sta. Tech. Bull. 174; CMI 410

P. selloum C. Koch

BACTERIA

Erwinia chrysanthemi Burk. et al.—Bacterial leaf rot (CWE, C)
Phytopath. 64:1526; CMI 553. A serious problem of this species in Ohio

Spathiphyllum sp.

FUNGI

Myrothecium (? *roridum*) Tode ex Fr.—Leaf spot (C) CMI 253

Symplocarpus foetidus (L.) Nutt. Skunk cabbage

FUNGI

Cercospora symplocarpi Pk.—Leaf spot (OS)

Syngonium podophyllum Schott Arrowhead vine

BACTERIA

Xanthomonas campestris (Pamm.) Dows.—Bacterial leaf blight (C)

FUNGI

Colletotrichum gloeosporioides Penz.—Anthracnose (C)

Zantedeschia aethiopica (L.) K. Spreng. Florist's calla

BACTERIA

Erwinia carotovora (L.R. Jones) Holland pv. *carotovora* (L.R. Jones) Bergey et al.—Soft rot (PDI) CMI 552

FUNGI

Phytophthora cryptogea Pethyb. & Laff. var. *richardiae* (Buis.) Ashby—
Root rot (Bimonth. Bull. Ohio Agr. Exp. Sta. 157:138)

ARALIACEAE

Brassaia actinophylla Endl. (*Schefflera a.*) Schefflera; umbrella tree

FUNGI

Colletotrichum sp.—Anthracnose (C)

Hedera helix L. English ivy

BACTERIA

Xanthomonas campestris pv. *hederae* (Arn.) Dye—Leaf spot (OS) J. Agr. Res. 48:807

FUNGI

Colletotrichum trichellum (Fr.) Duke (*Vermicularia t.* Fr.)—Leaf spot (CWE) Sutton 1980; Arx 1970
Phyllosticta concentrica Sacc.—Leaf spot (CWE, OS)
Pythium sp.—Root rot (ODA)
Rhizoctonia solani Kuehn—Root rot (C)

***Panax quinquefolius* L. Ginseng**

FUNGI

Alternaria panax Whet.—Leaf blight, root rot (OS) OAES Bull. 522
Phytophthora cactorum (Leb. & Cohn) Schroet.—Root and stem rot (USDA Yearbook 1906) Cornell Univ. Agr. Exp. Sta. Bull. 363
Ramularia sp.—From roots (C) Phytopath. 8:557-71
Sclerotinia sclerotiorum (Lib.) dBy.—Root rot (J. Agr. Res. 5:291) Mycotaxon 9:365; CMI 513
S. smilacina Durand—Black root rot (OS; OAES Bull. 522) Correct name appears to be *Stromatinia panacis* (Rankin) Kohn. See Seaver 1951
Thielaviopsis basicola (Berk. & Br.) Ferr.—Black root (PDI) CMI 170
Verticillium albo-atrum Reinke & Berth.—Wilt (PDI) CMI 255, 256; Rev. Plant Pathol. 53:157

NEMATODES

Meloidogyne hapla Chitwood—Root knot (RMR)

ARAUCARIACEAE

(Sometimes considered in Pinaceae)

***Araucaria heterophylla* (Salisb.) Franco Norfolk Island pine**

FUNGI

Cryptospora longispora Servazzi (? Imp. St. *Cytospora*)—Needle and branch blight (CWE, C)

ARISTOLOCHIACEAE

***Asarum canadense* L. Wild ginger**

FUNGI

Sclerotinia sclerotiorum (Lib.) dBy.—Rhizome rot (CWE) Mycotaxon. 9:364; CMI 513
Synchytrium asari Arth. & Holw.—Leaf gall (Plant Dis. Rptr. 25:190) Karling 1964

ASCLEPIADACEAE

***Asclepias amplexicaulis* Sm. Milkweed**

FUNGI

Cercospora clavata (Gerard) Cke.—Leaf spot (OS)

***A. incarnata* L. Swamp milkweed**

FUNGI

Cercospora clavata (Gerard) Cke.—Leaf spot (OC)
Septoria asclepiadicola Ell. & Ev.—Leaf spot (OS)
Uromyces asclepiadis Cke.—Rust (OS)

***A. quadrifolia* Jacq. Four-leaved milkweed**

FUNGI

Uromyces asclepiadis Cke.—Rust (Arthur 1934)

***A. syriaca* L. Common milkweed**

FUNGI

Cercospora clavata (Gerard) Cke.—Leaf spot (OS)
C. venturioides Pk.—Leaf spot (CWE) Confirmed by Chupp
Erysiphe cichoracearum DC.—Powdery mildew (OS) CMI 152
Rhizoctonia solani Kuehn—Root rot (Roberts, M.Sc. Thesis, OSU 1977)
Uromyces asclepiadis Cke.—Rust (OS)

***A. tuberosa* L. Butterfly-weed**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS) CMI 152

BALSAMINACEAE

***Impatiens balsamina* L. Garden balsam**

FUNGI

Septoria noli-tangeris Gerard—Leaf spot (PDI)

***I. capensis* Meerb. Spotted touch-me-not, jewel weed**

FUNGI

Puccinia argentata (Schultz) Wint.—Rust (OS)
P. recondita Rob. ex. Desm.—Rust (OS)
Septoria noli-tangeris Gerard—Leaf spot (PDI)

***I. pallida* Nutt. Pale touch-me-not**

FUNGI

Plasmopara obducens (Schroet.) Schroet.—Downy mildew (CWE) Ohio, J. Sci. 70:218
Puccinia recondita Rob. ex Desm.—Rust (OS)

***I. wallerana* Hook. Impatiens, sultana**

FUNGI

Fusarium sp.—From lower stem (CWE)
Gloeosporium sp.—Leaf spot (CWE)
Pythium ultimum Trow—Damping off (Plant Disease 66:731-733)
Rhizoctonia solani Kuehn—Damping off (Stephens, Ph.D. Dissertat., OSU 1978)
Verticillium sp.—Wilt (CWE)

VIRUSES, VIROIDS, MYCLOPLASMAS

Tomato spotted wilt virus (TSWV)—Spotted wilt; chlorosis, necrosis, bronzing, etc. (STN) CMI/AAB No. 39
Tobacco mosaic virus (TMV)—Mosaic, stunting (STN)

***Impatiens* sp. New Guinea cultivars**

VIRUSES, VIROIDS, MYCOPASMAS

Tomato spotted wilt virus—Spotted wilt, necrosis, chlorosis, bronzing, etc. (STN) CMI/AAB No. 39
Tobacco mosaic virus—Mosaic (STN)

BEGONIACEAE

***Begonia x hiemalis* Fotsch. Rieger-elatior begonias**

BACTERIA

Xanthomonas campestris pv. *begoniae* (Takimoto) Dye—Leaf blight (Plant Dis. Rptr. 61:649)

FUNGI

Botrytis cinerea Pers. (Perf. St. *Botryotinia*)—Gray mold (CWE) Strider 1985; CMI 431
Oidium sp.—Powdery mildew (CWE; Plant Dis. 65:68; Quinn, Ph.D. Dissertat., OSU 1980)
Pythium sp.—Root rot (C)

NEMATODES

Aphelenchoides fragariae Ritzema-Bos—Leaf nematode (RMR; Plant Dis. Rptr. 58:911; J. Nematology 6:215; Peirson, M.Sc. Thesis, OSU 1974)

B. x semperflorens-cultorum Hort. Bedding begonia

FUNGI

Botrytis cinerea Pers.—Gray mold (CWE)
Oidium sp.—Powdery mildew (CWE)
Rhizoctonia solani Kühn—Root and stem rot (PDI)
Thielaviopsis basicola (Berk. & Br.) Ferr.—Root rot (Ohio Agr. Exp. Sta. Bull. 73) CMI 170

VIRUSES, VIROIDS, MYCOPLASMAS

Tomato spotted wilt virus (TSWV)—Spotted wilt (STN) CMI/AAB No. 39

B. tuberhybrida Voss. Hybrid tuberous begonia

FUNGI

Botrytis cinerea Pers.—Gray mold blight (CWE)

BERBERIDACEAE

Berberis x mentorensis L. Ames Mentor barberry

BACTERIA

Pseudomonas syringae pv. *berberidis* (Thornberry & H.W. Anderson) Young et al.—Leaf spot (PK, OS) Jour. Agr. Res. 43:29

B. thunbergii DC. Japanese barberry

BACTERIA

Pseudomonas syringae pv. *berberidis* (Thornberry & H.W. Anders.) Young et al.—Bacterial leaf spot (OS) Jour. Agr. Res. 43:29-36

FUNGI

Verticillium albo-atrum Reinke & Berth.—Wilt (C) CMI 255, 256; Rev. Plant Pathol. 53:157

NEMATODES

Meloidogyne hapla Chitwood (RMR)—Root knot

B. vulgaris L. European barberry

FUNGI

Kabatiella berberidis (Cooke) Arx (*Gloeosporium b.* Cooke)—Leaf spot (PDI) Arx 1970
Puccinia graminis Pers.—Leaf rust (OS)

Caulophyllum thalictroides (L.) Michx. Blue cohosh

FUNGI

Cercospora caulophylli Pk.—Leaf spot (CWE; OS)

Podophyllum peltatum L. Mayapple

FUNGI

Phyllosticta podophylli (Curt.) Wint.—Leaf spot (OS) Grove 1935
Puccinia podophylli Schw.—Rust (OS)
Septoria podophyllina Pk.—Leaf spot (OS)
Septotia podophyllina (Ell. & Ev.) Arx [*Septogloeum podophyllum* (Ell. & Ev.) Sacc., Perf. St. *Septotinia podophyllina* Whetzel] Leaf blight (OS) Arx 1970; Seaver 1951

BETULACEAE

Alnus sp. Alder

FUNGI

Lenzites trabea Pers. ex Fr. (*Gloeophyllum*)—Wood decay (PDI)
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

A. rugosa (DuRoi) Spreng. Speckled alder

FUNGI

Erysiphe aggregata (Pk.) Farl.—Powdery mildew of catkins (PDI)
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

Phyllactinia guttata (Fr.) Lev.—Powdery mildew (OS; Ohio J. Sci. 66:570)

Betula sp. Birch

FUNGI

Daedalea confragosa Bolt. ex Fr.—Wood rot (PDI) Overholts 1953
Fomes fomentarius (Fr. ex Fr.) Kickx—Heart rot (PDI) Ibid.
Ganoderma applanatum (Pers. ex Wallr.) Pat.—Heart rot (PDI) Ibid.
Lenzites betulina L. ex Fr.—Sapwood rot (PDI) Ibid.
Melampsorium betulinum (Fr.) Kleb.—Leaf rust (CWE)
Melanconis stilbostoma (Fr.) Tul. [Imp. St. *Melanconium betulinum* (Fr.) Kleb.]—On branches, ? canker (CWE) Barr 1978
Polyporus betulinus Bull. ex Fr. (*Piptoporus*)—Wood rot (Overholts 1953)
Poria spp.—Wood rots (PDI)—Wood rot
Schizophyllum commune Fr.—Wood rot (PDI) Miller 1972; Mycologia 53:575
Septoria sp.—Leaf spot (CWE)
Sphaeropsis sp.—On branches, ? dieback (OAES Monthly Bull. Vol.1, No. 10)

B. lenta L. Sweet birch

FUNGI

Fomes connatus (Weinm.) Gill. (*Oxyporus*)—Heart rot (PDI)
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (5th Ann. Rpt. Ohio Acad. Sci.)
Septoria sp.—Leaf spot (CWE)

B. nigra L. River birch

FUNGI

Cryptocline betularum (Ell. & Mart.) Arx (*Gloeosporium betularum* Ell. & Mart.)—Anthracnose leaf spot (OS, CWE) Arx 1970
Trametes suaveolens Fr.—Wood rot (Mycologia 65:192) Overholts 1953

ABIOTIC

Iron deficiency—Chlorosis (E.M. Smith, OARDC Res. Cir. 263)

B. papyrifera Marsh. Paper birch

FUNGI

Cryptocline betularum (Ell. & Mart.) Arx (*Gloeosporium betularum* Ell. & Mart.)—Anthracnose leaf spot (CWE) Arx 1970
Discula betulina (West.) Arx (*Gloeosporium betulicola* Sacc. & Dearn.)—Anthracnose leaf spot (CWE) Ibid.
Septoria betulae (Lib.) West.—Leaf spot (CWE)

B. pendula Roth European white birch

FUNGI

Cryptocline betularum (Ell. & Mart.) Arx (*Gloeosporium b.* Ell. & Mart.)—Anthracnose leaf spot (CWE) Arx 1970
Discula betulina (West.) Arx (*Gloeosporium betulicola* Sacc. & Dearn.)—Anthracnose leaf spot (CWE) Arx 1970
Melanconium sp. (Perf. St. *Melanconis*)—On stems, ? canker (C)

INSECTS, MITES

Agilus anxius Gory (Bronze birch borer)—Dieback—in the upper crown at first. A serious pest on this and certain other birches

ABIOTIC

Iron deficiency—Chlorosis (E.M. Smith, OARDC Res. Cir. 263)

Carpinus caroliniana Walt. American hornbeam

FUNGI

Aleurodiscus oakesii (Berk. & Curt.) Hohn. & Litsch.—Bark patch (WBC) Can. J. Bot. 42:213 and 42:723
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)
Monostichella robergei (Desm.) Hohn. (*Gloeosporium robergei* Desm. Perf. St. *Gnomonia* or *Sphaerognomonia*)—Leaf spot (OS, CWE) Barr 1978; Sutton 1980; Arx 1970
Phyllactinia guttata (Fr.) Lev.—Powdery mildew (OS)
Steccherinum ochraceum (Pers. ex Fr.) S.F. Gray—Wood rot, white rot (WBC)

Stereum striatum (Fr.) Fr.—Wood decay (WBC) USDA Agr. Monograph No. 24

***Corylus americana* Walt. American hazelnut**

FUNGI

Gnomoniella coryli (Batsch.) Sacc.—Leaf spot (OS) Trans. Brit. Mycol. Soc. 24:145. See Monod 1983

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

Monostichella coryli (Desm.) Hohn. [*Gloeosporium coryli* (Desm.) Sacc., *Piggotia coryli* (Desm.) Sutton]—Leaf spot (CWE) Sutton 1980; Arx 1970

***Ostrya virginiana* (Mill.) K. Koch Hophornbeam**

FUNGI

Aleurodiscus oakesii (Berk. & Curt.) Hohn. & Litsch.—Bark patch (PDI) Can. J. Bot. 42:213

Fusarium lateritium Nees ex Fr.—On twigs, ? dieback (PDI)

Gloeosporium ? *robergei* Desm. [*Monostichella* r. (Desm.) Hohn., Perf. St. *Sphaerognomonium carpineae* (Fr.) Poteb.]—Leaf spot (CWE) Sutton 1980; Barr 1978. See *Carpinus*

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OC, OS) *Taphrina virginica* Seym. & Sadeb.—Leaf blister (Plant Dis. Rptr. 25:191) Mix 1949

BIGNONIACEAE

***Campsis radicans* (L.) Seem Trumpet-creeper**

FUNGI

Cercospora sordida Sacc.—Leaf spot (PDI)

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

***Catalpa bignonioides* Walt. Catalpa**

FUNGI

Alternaria sp.—Leaf spot, ? secondary (CWE)

Cercospora catalpae Wint.—Leaf spot (OS)

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

Phomopsis sp.—On twigs (PDI)

Phyllactinia guttata (Fr.) Lev.—Powdery mildew (OS; Ohio J. Sci. 66:570)

Phyllosticta catalpae Ell. & Martin—Leaf spot (OS) Hepting 1971

Polyporus versicolor L. ex Fr. (*Coriolus versicolor*)—White spongy rot (PDI) Miller 1972

Verticillium albo-atrum Reinke & Berth.—Wilt (CWE) CMI 255, 256

NEMATODES

Meloidogyne sp.—Root knot (PDI)

***C. speciosa* Warder Northern catalpa**

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS; Ohio J. Sci. 66:570)

Phyllosticta catalpae Ell. & Martin—Leaf spot (PDI) Hepting 1971

Polyporus adustus Willd. ex Fr.—Brown butt rot (PDI) Overholts 1953

P. hirsutus Wulf. ex Fr. (*Coriolus*)—White sapwood rot (PDI) Ibid.

Schizophyllum commune Fr.—Sapwood rot (PDI) Miller 1972

Sclerotinia sp.—Leaf wilt (OAES Month. Bull. Vol. 1, No. 10)

Stereum hirsutum (Willd. ex Fr.) Gray—Wood rot (PDI) USDA Agr. Monograph 24

Thielaviopsis basicola (Berk. & Br.) Ferr.—Black root rot of seedlings (PDI) CMI 170

BORAGINACEAE

***Anchusa azurea* Mill. Bugloss**

FUNGI

Sclerotinia sclerotiorum (Lib.) dBy.—Crown rot (CWE) Mycotaxon 9:365; CMI 513

***Brunnera macrophylla* (Adams) Johnst. Siberian bugloss**

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

***Hackelia virginiana* (L.) Johnst. Beggar's lice, stickseed**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

***Myosotis sylvatica* Hoffm. Garden forget-me-not**

FUNGI

Oidium sp.—Powdery mildew. Probably a species of *Erysiphe* (CWE; Ohio J. Sci. 66:570)

BUXACEAE

***Buxus sempervirens* L. Boxwood**

FUNGI

Macrophoma candollei (Berk. & Br.) Berl. & Vogl.—On leaves (OS) *Paecilomyces buxi* Bezerra [*Verticillium buxi* (Lk.) Sacc.]—On leaves, twigs, and branches; secondary (PDI) Mycologia 36:416

Volutella buxi (DC. ex Fr.) Berk. & Br. [Perf. St. *Pseudonectria rousseleana* (Mont.) Seaver]—On twigs and leaves; associated with dieback; ? secondary (PDI) Mycologia 36:416

***Pachysandra terminalis* Sieb. & Zucc. Japanese spurge**

FUNGI

Rhizoctonia solani Kuehn—? Root rot (C)

Volutella pachysandricola Dodge (Perf. St. *Pseudonectria* p. Dodge)—Leaf blight and stem rot (OS, CWE) Mycologia 36:532

CACTACEAE

***Schlumbergera truncata* (Haw.) Moran Christmas cactus**

BACTERIA

Erwinia sp.—Soft rot (C)

FUNGI

Pythium sp.—Root rot (C)

***Cereus* sp.**

FUNGI

Colletotrichum sp.—On cladodes (C)

CAMPANULACEAE

***Campanula* sp. Bellflower**

FUNGI

Rhizoctonia solani Kuehn—Root rot (C)

***C. americana* L. Tall bellflower**

FUNGI

Coleosporium campanulae Lev. ex Kickx—Rust (OS)

Mycosphaerella campanulae (Ell. & Kell.) Jacz.—On stems (PDI)

***Specularia perfoliata* (L.) A. DC. (Triodanis perfoliata) Venus's-looking glass**

FUNGI

Septoria speculariae Berk. & Curt.—Leaf spot (OS)

CANNABINACEAE

***Cannabis sativa* L. Hemp**

FUNGI

Septoria cannabis (Lasch) Sacc.—Leaf spot (OS)

***Humulus* sp. Hop**

FUNGI

Pseudoperonospora humuli (Miy. & Tak.) G.W. Wils.—Downy mildew (Ohio J. Sci. 70:218) CMI Mycol. Paper No. 148

***H. japonicus* Sieb. & Zucc. Japanese hop**

FUNGI

Sphaerotheca macularis (Wallr.) Lind.—Powdery mildew (CWE; Ohio J. Sci. 66:570)

***H. lupulus* L. Common hop**

FUNGI

Septoria humuli West.—Leaf spot (OS) Grove 1935
Verticillium albo-atrum Reinke & Berth.—Wilt (PDI) Rev. Pl. Path. 53:157; CMI 255, 256

CANNACEAE

***Canna x generalis* Bailey Canna**

BACTERIA

Pseudomonas cannae (Bryan) Stapp—Bacterial bud rot (PDI) J. Agr. Res. 21:143

FUNGI

Puccinia thaliae Diet.—Rust (PDI)

CAPPARIDACEAE

***Cleome hasslerana* Chodat (Often listed as *C. spinosa* L.) Spider-flower**

FUNGI

Oidium sp.—Powdery mildew (CWE; Ohio J. Sci. 66:570)

CAPRIFOLIACEAE

***Lonicera canadensis* Marsh. American fly-honey-suckle**

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

***L. dioica* L.**

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

***L. oblongifolia* (J. Goldie) Hook. Swamp fly-honey-suckle**

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (NFC)

***L. tartarica* L. Tartarian honeysuckle**

FUNGI

Insolibasidium deformans (Gould) Oberwinkler & Bandoni
(*Herpobasidium deformans* Gould; Imp. St. *Glomopsis lonicerae*

Donk)—Leaf blight (OS) St. Univ. Iowa Studies Nat. Hist. 19:90; Trans. Brit. Mycol. Soc. 83:639

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (PDI)

INSECTS, MITES

Hyadaphis tartaricae (Aizenberg)—Witches-broom of new growth caused by feeding of aphids (CWE)

***Sambucus canadensis* L. American elderberry**

FUNGI

Cercospora depazeoides (Desm.) Sacc.—Leaf spot (OS)

Microsphaera grossulariae (Wallr.) Lev.—Powdery mildew (OS)

M. penicillata (Wallr.) Lev.—Powdery mildew (OS)

Puccinia bolleyana Sacc.—Rust (OS)

Septoria sambucina Pk.—Leaf spot (OS)

***S. pubens* Michx. Scarlet elderberry**

FUNGI

Microsphaera grossulariae (Wallr.) Lev.—Powdery mildew (OC) May be *M. penicillata*

***Symphoricarpos albus* (L.) Blake Snowberry**

FUNGI

Alternaria sp.—Brown rot of fruit (PDI)

Glomerella cingulata (Stonem.) Spauld. & Schrenk—Fruit rot, canker (Mycologia 23:159)

Microsphaera diffusa G.W. Clint. & Pk.—Powdery mildew (Ohio J. Sci. 66:570)

***S. chenaultii* Rehd.**

FUNGI

Microsphaera diffusa G.W. Clint. & Pk.—Powdery mildew (Ibid.)

***S. occidentalis* Hook. Wolfberry**

FUNGI

Microsphaera diffusa G.W. Clint. & Pk.—Powdery mildew (Ibid.)

***S. orbiculatus* Moench. Coralberry**

FUNGI

Microsphaera diffusa G.W. Clint. & Pk.—Powdery mildew (Ibid.)

***Viburnum acerifolium* L. Maple-leaved viburnum**

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

Plasmopara viburni Pk.—Downy mildew (OS) Ohio J. Sci. 70:218

***V. x burkwoodii* Hort. Burkw. & Shipw.**

BACTERIA

Pseudomonas syringae pv. ? *viburni* (Thornberry & Anderson) Young et al.—Bacterial leaf and twig blight (CWE)

***V. carlesii* Hemsl.**

FUNGI

Plasmopara viburni Pk.—Downy mildew (CWE, OS)

***V. cassinoides* L. Withe-rod**

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

***V. dentatum* L. Arrowwood**

FUNGI

Coleosporium viburni Arth.—Rust (Plant Dis. Rptr. 17:27)

***V. x juddii* Rehd.**

BACTERIA

Pseudomonas syringae pv. ? *viburni* (Thornberry & Anderson) Young et al.—Bacterial leaf spot (CWE)

V. lantana L. Wayfaring tree

FUNGI

Plasmopara viburni Pk.—Downy mildew (CWE, OS)

V. lentago L. Nannyberry

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

Ramularia viburni Ell. & Ev.—Leaf spot (CWE) J. Mycol. 5:69

V. opulus L. European cranberry bush

BACTERIA

Pseudomonas syringae pv. *viburni* (Thornberry & Anderson) Young et al.—Bacterial leaf spot (OS, CWE)

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (Imp. St.

Dothiorella sp.)—Canker (C) Barr 1972; CMI 395

Cercospora varia Pk.—Leaf spot (CWE, OS)

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (CWE)

Phomopsis sp.—Stem gall (CWE)

Phyllosticta sp.—Leaf spot (CWE)

Plasmopora viburni Pk.—Downy mildew (OS, CWE)

V. plicatum Thunb. (V. tomentosum)

FUNGI

Cercospora viburnicola Ray—Leaf spot (CWE) Verified by Chupp

Phyllosticta sp.—Leaf spot (ODA)

Verticillium albo-atrum Reinke & Berth.—Wilt (CWE, PK) CMI 255, 256

V. x pragensis Hort.

BACTERIA

Pseudomonas sp.—Bacterial leaf spot (CWE)

V. prunifolium L. Black haw

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

V. x rhytidophylloides Suring.

FUNGI

Plasmopara viburni Pk.—Downy mildew (ODA, PK)

V. setigerum Hance

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (Imp. St.

Dothiorella sp.)—Canker (C) Barr 1972; CMI 395

V. trilobum Marsh. Highbush cranberry

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (Imp. St.

Dothiorella)—Canker (CWE) Ibid.

Cercospora varia Pk.—Leaf spot (CWE)

V. wrightii Miq. Leatherleaf

NEMATODES

Pratylenchus sp.—Lesion nematode (ODA, PK)

Weigela sp. Weigela

NEMATODES

Meloidogyne sp.—Root knot nematode (ODA)

CARICACEAE

Carica papaya L. Papaya

FUNGI

Oidium sp.—Powdery mildew (OSU Botany greenhouse) (CWE)

CARYOPHYLLACEAE

Agrostemma githago L. Corn cockle

FUNGI

Diplosporonema delastrei (Delacr.) Petrak [*Marssonina delastrei* (Delacr.) Magn.]—Leaf spot (OS) Sutton 1980

Cerastium vulgatum L. Mouse-ear chickweed

FUNGI

Septoria cerastii Rob. ex Desm.—Leaf spot (CWE) Grove 1935; N. Jersey Agr. Exp. Sta. Bull. 313

Dianthus armeria L. Grass pink

FUNGI

Septoria dianthi Desm.—Leaf spot (OS, CWE) Grove 1935

D. barbatus L. Sweet william

FUNGI

Cylindrocladium floridanum Sob. & Szym. (Plant. Dis. Rptr. 52:615) Mycologia 61:957; CMI 421

Rhizoctonia solani Kuehn—Root and stem rot (C)

D. caryophyllus L. Glasshouse carnation

BACTERIA

Corynebacterium fascians (Tilford) Dowson—Fasciation (CWE) J. Agr. Res. 53:383-394; CMI 121

Erwinia chrysanthemi Burk. et al.—Slow wilt (LJH) Plant Pathology 5:19; CMI 553

Pseudomonas caryophylli (Burkh.) Starr & Burk.—Wilt (C, CWE) Ohio Agr. Exp. Sta. Bull. 674; Phytopath. 57:1353; CMI 373

P. woodsii (Smith) Stevens—Leaf spot (Plant Dis. Rptr. Sup. 65) Phytopath. 25:114 (A synonym of *P. andropogonis*)

FUNGI

Alternaria dianthi Stevens & Hall—Leaf spot and branch rot (C) Ellis 1971; Cornell Agr. Exp. Sta. Bull. 790

Botrytis cinerea Pers. (Perf. St. *Botryotinia*)—Gray mold blossom blight (CWE) Strider 1985

Fusarium graminearum Schw. [Perf. St. *Gibberella zeae* (Schw.) Petch]—Stem rot (C) Phytopath. 61:743

F. oxysporum Schlecht. f. sp. *dianthi* Snyder & Hans.—Wilt (C) Cornell Univ. Agr. Exp. Sta. Bull. 788

F. poae (Pk.) Wr.—Bud rot (CWE) Phytopath. 30:835

Pythium ultimum Trow—Root rot (C)

Rhizoctonia solani Kuehn—Root and stem rot (C, CWE) Parmeter 1970

Sclerotium rolfsii Sacc. (Perf. St. *Athelia*)—Crown rot (C) N. Car. Agr. Exp. Sta. Tech. Bull. 174; CMI 410

Septoria dianthi Desm.—Leaf spot (OAES Bull. 214; ODA) Grove 1935

Uromyces dianthi (Pers.) Niessl—Rust (OS) CMI 180

VIRUSES, VIROIDS, MYCOPLASMAS

Carnation mottle virus—Mottle (Olson, Yoder Bros.) CMI/AAB No. 7

Carnation necrotic fleck virus—Necrotic fleck (REH) CMI/AAB No. 136

Carnation ringspot virus—Ringspot (Phytopath 47:714) CMI/AAB No. 21

Gypsophila elegans Bieb. Baby's breath

BACTERIA

Corynebacterium fascians (Tilford) Dowson—Fasciation (PDI) J. Agr. Res. 53:383; CMI 121

G. paniculata L. Baby's breath

BACTERIA

Agrobacterium gypsophilae (Brown) Starr & Weiss—Crown and root gall
Corynebacterium fascians (Tilford) Dowson—Fasciation (PDI) J. Agr. Res. 53:383; CMI 121

FUNGI

Fusarium sp. Root rot and wilt (C)
Rhizoctonia solani Kuehn—Root rot (C)

NEMATODES

Meloidogyne hapla Chitwood—Root knot (RMR)

Lychnis chalcidonica L. Maltese cross

FUNGI

Phyllosticta lychnidis (Fr.) Ell. & Ev.—Leaf spot (OS)

Saponaria officinalis L. Soapwort, Bouncing bet

FUNGI

Alternaria saponariae (Pk.) Neerg.—Leaf spot (OS) Neergaard 1945

Silene virginica L. Fire pink

FUNGI

Septoria sp.—Leaf spot (CWE)
Ustilago violacea (Pers.) Fckl.—Anther smut (CWE; Ohio J. Sci. 59:313)

Stellaria media (L.) Cyr. Common chickweed

FUNGI

Septoria stellariae Rob. & Desm.—Leaf spot (CWE) Grove 1935
Synchytrium stellariae Fckl.—Leaf gall or blister (M. J. Powell, Miami Univ.) Karling 1964

CELASTRACEAE

Celastrus scandens L. Bittersweet

FUNGI

Phyllactinia guttata (Wallr.) Lev.—Powdery mildew (OS)
Ramularia celastri Ell. & Martin—Leaf spot (OS)

Euonymus atropurpurea Jacq. Wahoo

FUNGI

Marssonina thomasina (Sacc.) Magn. [*Septogloeum t.* (Sacc.) Hohn.]—Leaf spot (OS) Sutton 1980
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)
Ramularia euonymi Ell. & Martin—Leaf spot (OS)

E. alata (Thunb.) Sieb. Winged euonymus

None reported

E. europea L. European euonymus or Spindletree

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (CWE)

E. fortunei (Turcz.) Hand.-Mazz. Wintercreeper

BACTERIA

Agrobacterium tumefaciens (E.F. Sm. & Towns.) Conn—Crown gall (OS)

FUNGI

Colletotrichum gloeosporioides Penz.—Anthracnose leaf and stem spots (HJH)
Oidium sp.—Powdery mildew (ODA, PK)
Phyllosticta euonymi Sacc.—Leaf spot (OS, CWE) Grove 1935
Phytophthora citrophthora (Sm. & Sm.) Leonian—Cutting rot and dieback (AFS, HJH) CMI 33

E. japonica Thunb. Evergreen euonymus

BACTERIA

Agrobacterium tumefaciens (E.F. Sm. & Towns.) Conn—Crown gall (ODA)

FUNGI

Oidium sp.—Powdery mildew (CWE) On plants in the greenhouse

E. kiautschovica Loes. (E. patens Rehd.) Spreading euonymus

BACTERIA

Agrobacterium tumefaciens (E.F. Sm. & Towns.) Conn—Crown gall (OS)

FUNGI

Mycocentrospora verrucosa Pollack & Ellett—Shot-hole leaf spot (OS; Mycologia 66:170; Plant Dis. Rptr. 57:807)
Oidium sp.—Powdery mildew (PK, ODA)

CHENOPODIACEAE

Atriplex patula L.

FUNGI

Cercospora dubia (Riess) Wint.—Leaf spot (OS)

Beta vulgaris var. cicla L. Swiss chard

FUNGI

Cercospora beticola Sacc.—Leaf spot (OS)

B. vulgaris L. Garden beet (A) and sugar beet (B). General reference—Compendium of Beet Diseases and Insects. 1986. American Phytopathological Society.

BACTERIA

Agrobacterium tumefaciens (Smith & Town.) Conn—Crown gall on B (OAES Bull. 126)
Pseudomonas syringae van Hall—Bacterial leaf spot (Amer. Phytopath. Soc. Compendium, 1986)

FUNGI

Aphanomyces cochlioides Drechs.—Black root, seedling blight on B (Warren, M.Sc. Thesis, OSU 1948; Phytopath. 38:883) Va. Agr. Exp. Sta. Tech. Bull. 151; USDA Tech. Bull. 1485
Cercospora beticola Sacc.—Leaf spot on A and B (OS)
Erysiphe polygoni DC.—Powdery mildew on B (LJH, CWE)
Phoma betae Frank (Perf. St. *Pleospora bjoerlingii* Byford)—Leaf spot, root rot (OAES Bull. 659) CMI 149
Pythium debaryanum Hesse—Root rot, seedling blight (Plant Dis. Rptr. Sup. 26) Not a valid name. See Plaats-Niterink 1981.
P. ultimum Trow—Root rot, seedling blight (OAES Bull. 496)
Rhizoctonia crocorum (Pers.) DC.—Violet root rot on A (PDI)
R. solani Kuehn—Crown rot, root rot, foliage blight, seedling blight on A & B (Plant Disease 66:246)
Septoria betae West.—Leaf spot on B (Plant Dis. Rptr. Sup. 45)
Streptomyces scabies (Thaxt.) Waks. & Henrici—Scab on B (OAES Bull. 121)

NEMATODES

Heterodera schachtii Schmidt—Cyst nematode on A (Plant Dis. Rptr. 53:118)
Meloidogyne incognita (Kofoid & White) Chitwood—Root knot on B (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Virus-like entity—Savoy (Plant Dis. Rptr. 42:502)
Virus—Mosaic on B (PDI) ?CMI/AAB No. 53
Beet yellow virus (BYV)—Beet yellows (Sherf and MacNab 1986)

ABIOTIC

Boron deficiency—Heart rot, dry rot (PDI)
Phosphorus deficiency—Black heart (PDI)

***Chenopodium album* L. Lamb's quarters**

FUNGI

Cercospora dubia (Riess) Wint.—Leaf spot (OS)
Peronospora farinosa (Fr.) Fr.—Downy mildew (OS)
Rhizoctonia solani Kuehn—Root rot (Roberts, M.Sc. Thesis, OSU 1977)
Stagonospora atriplicis (West.) Lind—Leaf spot (OS)

***Spinacia oleracea* L. Spinach**

BACTERIA

Erwinia sp.—Soft rot in transit and market (PDI)

FUNGI

Peronospora farinosa (Fr.) Fr. [*P. effusa* (Grev.) Rab.]—Downy mildew (OS) Walker 1952
Pythium debaryanum Hesse—Root rot (Plant Dis. Rptr. Sup. 86) Not now considered a valid species. See Plaats-Niterink 1981.

COMPOSITAE

***Achillea millefolium* L. Yarrow**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Rhizoctonia solani Kuehn—Root rot (PDI)

***A. ptarmica* L. Sneezewort**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE)

***Actinomeris alternifolius* (L.) Britt. [*Verbesina a.* (L.) Britt.] Wing-stem**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

***Ageratum houstonianum* Mill. Flossflower**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Puccinia conoclinii Seym. ex Burr.—Rust (OS)
Pythium sp.—Seedling blight (Stephens, M.Sc. Thesis, OSU 1976)

***Ambrosia artemisiifolia* L. Ragweed**

FUNGI

Albugo tragopogonis (Pers.) S.F. Gray—White blister (CWE) Sydowia 9:339; CMI 458
Erysiphe cichoracearum DC.—Powdery mildew (OS)
Plasmopara halstedii (Farl.) Berl. & deToni—Downy mildew (Ohio J. Sci. 70:218)
Rhizoctonia solani Kuehn—From roots (Roberts M.Sc. Thesis, OSU 1977)
Septoria bacilligera Wint.—Leaf spot (OS)

***A. trifida* L. Giant ragweed**

FUNGI

Cercospora trifidae Chupp—Leaf spot (OS)
Entyloma compositarum Farl.—Smut (OS)
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Plasmopara halstedii (Farl.) Berl. & deToni—Downy mildew (Ohio J. Sci. 70:218)
Puccinia xanthii Schw.—Rust (OS)
Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis, OSU 1977)

***Antennaria plantaginifolia* (L.) Hook. Pussy-toes; everlasting**

FUNGI

Albugo tragopogonis (Pers.) S.F. Gray—White blister (OS) CMI 458; Ohio J. Sci. 70:218
Phyllosticta antennariae Ell. & Ev.—Leaf spot (OS)

***Arctium lappa* L. Great burdock**

FUNGI

Cercospora arctii-ambrosiae Halst.—Leaf spot (OS)
Phyllosticta lappae Sacc.—Leaf spot (N. Amer. Flora 6:32)
Puccinia calcitrapae DC. var. *bardanae* (Wallr.) Cumm.—Rust (OS) Cummins 1978 (Host may be misidentified.)
Septoria lapparum Sacc.—Leaf spot (OS)

***A. minus* (Mill.) Bernh. Common burdock**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Puccinia calcitrapae DC. var. *bardanae* (Wallr.) Cumm.—Rust (OS) Cummins 1978

NEMATODES

Meloidogyne sp.—Root knot (PDI)

***Aster alpinus* L.**

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

***A. ciliolatus* Lindl.**

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (Plant Dis. Rptr. 17:25)

***A. cordifolius* L. Blue woodland aster**

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Puccinia cnici-oleracei Pers. ex Desm. (*P. asteris* Duby)—Rust (OS)
P. dioicae Magn. (*P. extensicola* Plowr.)—Rust (Plant Dis. Rptr. 27:26)
Septoria astericola Ell. & Ev.—Leaf spot (OS)
S. atropurpurea Pk.—Leaf spot (4th Ann. Rpt. Ohio Acad. Sci.)

***A. ericoides* L.**

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Puccinia cnici-oleracei Pers. ex Desm.—Rust (OS)

***A. laevis* L. Smooth aster**

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (OS)

***A. lateriflorus* (L.) Britt. Starved aster**

Coleosporium asterum (Diet.) Syd.—Rust (OC)

***A. lowrieanus* Porter**

Coleosporium asterum (Diet.) Syd.—Rust (OS)

***A. macrophyllus* L. Large-leaved aster**

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (OC)
Puccinia cnici-oleracei Pers. ex Desm. (*P. asteris* Duby)—Rust (OS)
P. dioicae Magn.—Rust (OS)
Septoria atropurpurea Pk.—Leaf spot (OC)

A. novae-angliae L. New England aster

FUNGI

Basidiophora entospora Roze & Cornu—Downy mildew (CWE) Ohio J. Sci. 70:218; CMI 681
Coleosporium asterum (Diet.) Syd.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (OS)
Puccinia cnici-oleracei Pers. ex Desm. (*P. asteris* Duby)—Rust (OS)

A. pilosus Willd. Hairy white aster

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

A. praealtus Poir.

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (Plant Dis. Rptr. 17:25)

A. prenanthoides Muhl. Crooked-stem aster

FUNGI

Basidiophora entospora Roze & Cornu—Downy mildew (Ohio J. Sci. 70:218) CMI 681
Ceratobasidium anceps (Bres. & Syd.) Jackson (Imp. St. *Sclerotium deciduum* J.J. Davis)—On leaves (CWE)
Coleosporium asterum (Diet.) Syd.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Puccinia cnici-oleracei Pers. ex Desm.—Rust (OS)

A. puniceus L. Purple-stem aster

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

A. sagittifolius Wedemeyer Arrow-leaved aster

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ibid.)
Puccinia dioicae Magn.—Rust (OS)

A. shortii Lindl.

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (OS)
Puccinia dioicae Magn.—Rust (OS)

A. simplex Willd.

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (Plant Dis. Rptr. 17:25)
Puccinia cnici-oleracei Pers. ex Desm. (*P. asteris* Duby)—Rust (OS)
P. dioicae Magn.—Rust (OS)

A. tradescantii L. This species needs verified

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (OS)
Puccinia cnici-oleracei Pers. ex Desm.—Rust (OS)
P. dioicae Magn.—Rust (OS)

A. undulatus L.

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (OS)

Bellis perennis L. English daisy

FUNGI

Sclerotinia sclerotiorum (Lib.) dBy.—Crown rot (CWE) Mycotaxon 9:365; CMI 513

Bidens cernua L.

FUNGI

Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (OS)

B. comosa (Gray) Wieg. (*B. tripartita* L.) Stick-tight

FUNGI

Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (MU)

B. coronata (L.) Britt Tickseed sunflower

FUNGI

Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (Ohio J. Sci. 66:570)

B. discoidea (T. & G.) Britt

FUNGI

Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (MU)

B. frondosa L. Beggar's-ticks

FUNGI

Plasmopora halstedii (Farl.) Berl. & de Toni—Downy mildew (OS)
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (Ohio J. Sci. 66:570)

Boltonia asteroides (L.) L'Her False chamomile

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE)

Cacalia atriplicifolia L. Indian plantain

FUNGI

Septoria cacaliae Ell. & Kell.—Leaf spot (OS)

C. muhlenbergii (Schultz-Bip.) Fern.

FUNGI

Sphaerotheca macularis (Wallr.) Lev.—Powdery mildew (NFC)

Calendula officinalis L. Pot-marigold

FUNGI

Puccinia melampodii Diet. & Holw.—Rust (OS)
Sclerotinia sclerotiorum (Lib.) dBy.—Stem & crown rot (PDI)
Sphaerotheca sp.—Powdery mildew (CWE)

Callistephus chinensis (L.) Nees China or annual aster

FUNGI

Ascochyta asteris (Bres.) Gloyer—Leaf spot (PDI)
Botrytis cinerea Pers.—Flower blight and stem rot (Plant Dis. Rptr. 41:369)
Coleosporium asterum (Diet.) Syd.—Rust (OS)
Fusarium oxysporum Schlecht.—Wilt (Ohio Agr. Exp. Sta. Bull. 659; CWE)
Rhizoctonia solani Kuehn—Seedling blight (Stephens, M.Sc. Thesis, OSU 1976)
Septoria callistephi Gloyer—Leaf spot (OS) Phytopath. 11:50

VIRUSES, VIROIDS, MYCOPLASMAS

Mycoplasma (MLO)—Yellows (CWE)

Catananche caerulea L. Cupid's dart

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

Centaurea cineraria L. Dusty miller

FUNGI

Rhizoctonia solani Kuehn—Stem and root rot (C, CWE)

C. dealbata Willd.

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

C. macrocephala Pushk. ex Wild.

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Ibid.)

Chrysanthemum balsamita L. Costmary

NEMATODES

Aphelenchoides ritzemabosi (Schwartz) Steiner—Leaf or foliar nematode (PK, ODA)

C. frutescens L. Marguerite

BACTERIA

Agrobacterium tumefaciens (Sm. & Towns.) Conn—Crown gall (Ohio J. Sci. 58:145)

NEMATODES

Meloidogyne sp.—Root knot nematode (PDI)

C. leucanthemum L. Oxeye daisy

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

C. maximum Ramond Shasta daisy

FUNGI

Verticillium albo-atrum Reinke & Berth.—Wilt (C) CMI 255, 256

NEMATODES

Meloidogyne sp.—Root knot (PDI)

C. x morifolium Ramat. Florist chrysanthemum

BACTERIA

Agrobacterium tumefaciens (E.F. Sm. & Towns.) Conn—Crown gall (Ohio J. Sci. 58:145)

Corynebacterium fascians (Tilford) Dows.—Fasciation (Jour. Agr. Res. 53:383)

Erwinia chrysanthemi Burkholder et al—Stem rot, wilt (Phytopath. 43:522) CMI 553

FUNGI

Alternaria alternata (Fr.) Kiessler—Ray speck (Rodebaugh, M.Sc. Thesis, OSU 1960; Ohio Florists' Assoc. Bull. 405)

Ascochyta chrysanthemi F.L. Stevens (Perf. St. *Mycosphaerella ligulicola* Baker, Dimock & Davis)—Stem and ray blight (C) Phytopath. 62:1188; CMI 622

Botrytis cinerea Pers.—Flower blight (CWE, C) Strider 1985

Erysiphe cichoracearum DC.—Powdery mildew (CWE; Ohio J. Sci. 66:570) Ibid.

Fusarium oxysporum Schlecht.—Wilt (C) Ibid.

Puccinia tanacetii DC. (*P. chrysanthemi* Roze)—Rust (OS) Cummins 1978; CMI 175

Pythium ultimum Trow—Root rot (C, AFS)

Rhizoctonia solani Kuehn—Stem and root rot (CWE)

Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot (C) Mycotaxon 9:365; CMI 513

Septoria chrysanthemi Allesch.—Leaf spot (OS) Trans. Brit. Mycol. Soc. 48:423

S. leucanthemi Sacc. (? *S. obesa* Syd.)—Leaf blotch (CWE) CMI 138

Verticillium albo-atrum Reinke & Berth.—Wilt (C, PDI) CMI 255, 256

NEMATODES

Aphelenchoides ritzemabosi (Schwartz) Steiner—Leaf nematode (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Mycoplasmata (MLO)-Yellow (PDI; Olson, Yoder Brothers)

Chrysanthemum mosaic virus—Mosaic (Ibid.)

Viroid—Stunt (Ibid.) Diener 1987

C. parthenium (L.) Bernh. Feverfew

FUNGI

Erysiphe cichoracearum DC. ex Merat—Powdery mildew (CWE; Ohio J. Sci. 66:570)

Cichorium endiva L. Endive

FUNGI

Rhizoctonia solani Kuehn—Root rot (C)

C. intybus L. Chicory

FUNGI

Cercospora cichorii J.J. Davis—Leaf spot (CWE)

Erysiphe cichoracearum DC.—Powdery mildew (CWE)

Cirsium altissimum (L.) Spreng. Tall thistle

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

C. arvense (L.) Scop. Canada thistle

FUNGI

Puccinia punctiformis (Strauss) Roehl.—Rust (OS) Cummins 1978

Septoria cirsii Niessl—Leaf spot (OS)

C. muticum Michx. Swamp thistle

FUNGI

Albugo tragopogonis (Pers.) S.F. Gray—White blister (NFC) CMI 458

C. vulgare (Savi) Lenore Bull thistle

FUNGI

Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis, OSU 1977)

Coreopsis grandiflora Hogg Tickseed

FUNGI

Oidium sp. (probably *Erysiphe cichoracearum*)—Powdery mildew (Ohio J. Sci. 66:570)

Plasmopara halstedii (Farl.) Berl. & deToni—Downy mildew (C)

Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot (Plant Dis. Rptr. 17:22) Mycotaxon 9:365; CMI 513

C. lanceolata L.

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE)

C. major Walt.

FUNGI

Coleosporium inconspicuum Arth.—Rust (Plant Dis. Rptr. 17:23) Cummins 1978

C. tinctoria Nutt. Annual coreopsis

FUNGI

Coleosporium inconspicuum Arth.—Rust (PDI)

Erysiphe cichoracearum DC.—Powdery mildew (CWE)

Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot (Plant Dis. Rptr. 17:22) CMI 513

C. tripteris L. Tall tickseed

FUNGI

Septoria coreopsidis J.J. Davis—Leaf spot (OS)

C. verticillata L. Whorled tickseed

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

Cosmos bipinnatus Cav. Common cosmos

FUNGI

Diaporthe stewartii Harrison.—Stem canker (CWE) Wehmeyer 1933
Erysiphe cichoracearum DC.—Powdery mildew (CWE)

Dahlia sp. Garden dahlia

BACTERIA

Pseudomonas solanacearum E.F. Sm.—Wilt (PDI)

FUNGI

Botrytis cinerea Pers.—Flower blight (C)
Erysiphe cichoracearum DC.—Powdery mildew (OS)
Fusarium sp.—Wilt, stem, root rot (PDI)
Verticillium albo-atrum Reinke & Berth.—Wilt (PDI) CMI No. 255, 256

VIRUSES, VIROIDS, MYCOPLASMAS

Virus—Mosaic-stunt (Ohio Agr. Exp. Sta. Bull. 446) CMI/AAB No. 51

Elephantopus carolinianus Willd. Elephant's foot

FUNGI

Coleosporium vernoniae Berk. & Curt.—Rust (OS) Cummins 1978

Erechtites hieracifolia (L.) Raf. Fireweed, pilewort

FUNGI

Plasmopara halstedii (Farl.) Berl. & deT.—Downy mildew (Ohio J. Sci. 70:218)
Septoria erechitis Ell. & Ev.—Leaf spot (OS)
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (Ohio J. Sci. 66:570)

Erigeron annuus (L.) Pers. Daisy fleabane

FUNGI

Basidiophora entospora Roze & Cornu—Downy mildew (Ohio J. Sci. 70:218) CMI 681
Cercospora cana (Pass.) Sacc.—Leaf spot (OS)
Plasmopara halstedii (Farl.) Berl. & deT.—Downy mildew (Ohio J. Sci. 70:218)
Puccinia cyperi Arth.—Rust (OS) (May not be this species.)
P. dioicae Magn.—Rust (OS)
Ramularia macrospora Fres.—Leaf spot (CWE, OS) Ellis & Ellis 1985
Sclerotinia sp.—Stem rot (CWE)
Septoria erigerontis Pk.—Leaf spot (OS)
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (NFC, OC)

E. canadensis L. Horseweed

FUNGI

Cercospora cana (Pass.) Sacc.—Leaf spot (Chupp 1953)
Erysiphe cichoracearum DC.—Powdery mildew (CWE)
Puccinia dioicae Magn.—Rust (OC)
Sclerotinia sp.—Stem rot (CWE)

E. philadelphicus L.

FUNGI

Puccinia dioicae Magn.—Rust (OS)

E. pulchellus Michx. Robin's-plantain

FUNGI

Puccinia dioicae Magn.—Rust (OS)
Septoria erigerontis Pk.—Leaf spot (Ohio Nat. 13:34)

E. strigosus Muhl. White-top

FUNGI

Puccinia cyperi Arth. (OS, CWE)
Septoria erigerontis Pk.—Leaf spot (OS)

Eupatorium sp.

FUNGI

Plasmopara halstedii (Farl.) Berl. & deT.—Downy mildew (Ohio J. Sci. 70:218)

Eupatorium fistulosum Barratt Joe-pye-weed

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

E. perfoliatum L. Common boneset

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ibid.)
Puccinia eleocharidis Arth.—Rust (OS)

E. purpureum L. Joe-pye-weed

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

E. rugosum Houtt. White snake-root

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ibid.)
Puccinia tenuis (Schw.) Burr.—Rust (OS)

Euthamia graminifolia (L.) Nutt. (Solidago g.)

FUNGI

Coleosporium delicatulum Arth.—Rust (OS)
Puccinia dioicae Magn.—Rust (OS)

Gaillardia x grandiflora Van Houtte Blanket flower

FUNGI

Septoria gaillardiae Ell. & Ev.—Leaf spot (CWE)

Gazania linearis (Thunb.) Druce Gazania

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE)

Gerbera jamesonii H. Bolus ex Hook. Transvaal daisy

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE)

Gnaphalium obtusifolium L. Cudweed

FUNGI

Puccinia investita Schw.—Rust (OS)

Helenium tenuifolium Nutt. Sneezeweed

FUNGI

Oidium sp. (Probably *Erysiphe cichoracearum*)—Powdery mildew (Ohio J. Sci. 66:570)

Helianthus annuus L. Common sunflower. General reference Amer. Soc. Agronomy, Monograph No. 19. 1979.

BACTERIA

Pseudomonas syringae vanHall—Leaf spot [Ohio Rpt. 66(2):19]

FUNGI

Alternaria helianthi (Hansf.) Tubaki & Nishihara—Leaf and stem spot (Plant Dis. 66:509) Ellis 1976; CMI 582; Mycotaxon 25:210
Diaporthe helianthi Munt.-Cvet.—Stem canker (Plant Dis. 67:911) Trans. Brit. Mycol. Soc. 85:477
Erysiphe cichoracearum DC.—Powdery mildew (CWE; Ohio J. Sci. 66:570)
Plasmopara halstedii (Farl.) Berl. & deT.—Downy mildew (Ohio J. Sci. 70:218) Phytopath. 68:1568

Puccinia helianthi Schw.—Rust (OS) CMI 55
Sclerotinia sclerotiorum (Lib.) dBy.—Stem and head rot (PEL, LJH)
Mycotaxon 9:365; Phytopath. 69:881
Septoria helianthi Ell. & Kell.—Leaf spot (OS) Stevens 1913; CMI 276

***H. decapetalus* L. Thinleaf sunflower**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Plasmopara halstedii (Farl.) Berl. & deToni—Downy mildew (Ohio J. Sci. 70:218)
Puccinia helianthi Schw.—Rust (OS) CMI 55

***H. divaricatus* L.**

FUNGI

Puccinia helianthi Schw.—Rust (OS) Ibid.
Septoria helianthi Ell. & Kell.—Leaf spot (OS) CMI 276

***H. x doricoides* Lam.**

FUNGI

Coleosporium helianthi (Schw.) Arth.—Rust (Plant Dis. Rptr. 17:22)
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

***H. giganteus* L. Giant sunflower**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Puccinia helianthi Schw.—Rust (OS) CMI 55

***H. grosseserratus* Martens**

FUNGI

Puccinia helianthi Schw.—Rust (OS) Ibid.

***H. hirsutus* Raf.**

FUNGI

Cercospora helianthi Ell. & Ev.—Leaf spot (OS)
Puccinia helianthi Schw.—Rust (OS) CMI 55

***H. kellermani* Britt. Kellerman's sunflower**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:270)

***H. laetiflorus* Pers. Showy sunflower**

FUNGI

Septoria helianthi Ell. & Kell.—Leaf spot (PDI)

***H. microcephalus* T. & G. Small wood sunflower**

FUNGI

Coleosporium helianthi (Schw.) Arth.—Rust (Plant Dis. Rptr. 17:23)

***H. mollis* Lam. Ashy sunflower**

FUNGI

Cercospora helianthi Ell. & Ev.—Leaf spot (Ohio Nat. 13:35)
Puccinia helianthi Schw.—Rust (OS)

***H. petiolaris* Nutt. Prairie sunflower**

FUNGI

Plasmopara halstedii (Farl.) Berl. & deToni—Downy mildew (Ohio J. Sci. 70:218)

***H. strumosus* L.**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Puccinia helianthi Schw.—Rust (OS)

***H. tuberosus* L. Jerusalem artichoke**

FUNGI

Coleosporium helianthi (Schw.) Arthur—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Plasmopara halstedii (Farl.) Berl. & deToni—Downy mildew (Ohio J. Sci. 70:218)
Puccinia helianthi Schw.—Rust (OS) CMI 55

***Hieracium venosum* L. Hawkweed**

FUNGI

Puccinia fraseri Arth.—Rust (OS)

***Iva xanthifolia* Nutt. Marsh-elder**

FUNGI

Septoria xanthifolia Ell. & Ev.—Leaf spot (Amer. Nat. 17:1165)

***Krigia virginica* (L.) Willd. Dwarf dandelion**

FUNGI

Puccinia dioicae Magn.—Rust (OS)

***Kuhnia eupatorioides* L. False boneset**

FUNGI

Puccinia kuhniae Schw.—Rust (OS)

***Lactuca biennis* (Moench) Fern. Tall blue lettuce**

FUNGI

Bremia lactucae Regel—Downy mildew (Ohio J. Sci. 70:218; CWE) CMI 682
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Puccinia minusensis Thum.—Rust (OS)

***L. canadensis* L. Wild lettuce**

FUNGI

Bremia lactucae Regel—Downy mildew (Ohio J. Sci. 70:218) CMI 682

***L. floridana* (L.) Gaertn.**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

***L. perennis* L.**

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

***L. sativa* L. Lettuce (General reference—Plant Dis. 70:982-987; Sherf and MacNab 1987)**

BACTERIA

Erwinia carotovora (L.R. Jones) Holland—Soft rot (Plant Dis. Rptr. Sup. 3)
Pseudomonas rhizoctonia (R.C. Thomas) Burk.—Leaf blight (OAES Bull. 359)

FUNGI

Botrytis cinerea Pers. (Perf. St. *Botryotinia*)—Gray mold rot (OAES Bull. 73)
Bremia lactucae Regel—Downy mildew (OS) CMI 682; Fla. Agr. Exp. Sta. Bull. (Tech.) 764
Fusarium sp.—Root rot (PDI)
Microdochium panattonianum (Berl.) Sutton et al (*Marssonina*)
Anthracnose (OAES Bull. 73) Chupp 1960; Trans. Brit. Mycol. Soc. 86:619
Pythium debaryanum Hesse—Seedling blight (UDSA Bull. 1366) Not a valid species. See Plaats-Niterink 1981
P. irregulare Buis.—Root rot (Plant Dis. 64:63)
P. polymastum Drechs.—Root rot (Ibid.)
P. ultimum Trow—Seedling blight (AFS, OAES Bull. 496)
P. vexans dBy.—From roots (Plant Dis. 64:63)

Rhizoctonia solani Kuehn—Bottom rot, damping-off (OAES Bull. 214; C)
Sclerotinia minor Jagger—Drop, watery soft rot (RCR) Mycotaxon 9:365
S. sclerotiorum (Lib.) dBy.—Watery soft rot, drop (OS) Ibid., CMI 513
Septoria lactucae Pass.—Leaf spot (CWE) Ellis & Ellis 1985

VIRUSES, VIROIDS, MYCOPLASMAS

Virus—mosaic (RCR) CMI/AAB No. 9
Mycoplasma—Aster yellows (RCR)

NEMATODES

Meloidogyne hapla Chitwood 1949—Root knot nematode (RMR)

L. scariola L. Prickly lettuce

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE)
Septoria lactucae Pass.—Leaf spot (OS) Ellis & Ellis 1985
S. lactucicola Ell. & Martin—Leaf spot (Ohio Nat. 13:34)

Layia platyglossa (Fisch. & C.A. Mey.) Gray Tidy-tips

FUNGI

Oidium sp.—Powdery mildew on plants in OSU garden (CWE; Ohio J. Sci. 66:570)

Liatris sp. Gay feather

FUNGI

Verticillium albo-atrum Reinke & Berth.—Wilt (C, ODA)

L. spicata (L.) Willd. Blazing star

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

Polymnia sp. Leafcup

FUNGI

Septoria polymnia Ell. & Ev. Leaf spot (OS)

Prenanthes sp.

FUNGI

Cercospora prenanthis Ell. & Kell.—Leaf spot (OC)

P. alba L. Rattlesnake root

FUNGI

Septoria nabali Berk. & Curt.—Leaf spot (CWE)
Sphaerotheca macularis (Wallr.) Lind.—Powdery mildew (Ohio J. Sci. 66:570)

P. altissima L. Rattlesnake root, lions-foot

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)
Puccinia orbicula Pk. & G.W. Clint.—Rust (OS)
Sphaerotheca macularis (Wallr.) Lind.—Powdery mildew (Ohio J. Sci. 66:570)

Pyrethrum asarifolia Michx. Pink wintergreen

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

Rudbeckia hirta L. Black-eyed Susan

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE)

R. laciniata L. Cone flower

FUNGI

Entyloma compositarum Farl.—Smut (OS)
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Plasmopara halstedii (Farl.) Berl. & de Toni—Downy mildew (Ohio J. Sci. 70:218)
Rhizoctonia solani Kuehn—Root rot (C)
Uromyces rudbeckiae Arth. & Holw.—Rust (OS)

Sanvitalia procumbens Lam. Creeping zinnia

FUNGI

Oidium sp.—Powdery mildew (CWE)

Senecio cineraria DC. Dusty-miller

FUNGI

Rhizoctonia solani Kuehn—Stem and root rot (C)

S. cruentus DC. Cineraria

VIRUSES, VIROIDS, MYCOPLASMAS

Tomato spotted wilt virus—Spotted wilt (STN)

Silphium integrifolium Michx.

FUNGI

Puccinia silphii Schw.—Rust (OS)

S. perfoliatum L. Indian-cup

FUNGI

Puccinia silphii Schw.—Rust (OS)

S. terebinthinaceum Jacq. Prairie-dock

FUNGI

Uromyces silphii Arth.—Rust (OS)

S. trifoliatum L. Rosinweed

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE)
Puccinia silphii Schw.—Rust (OS)

Solidago sp. Goldenrod

FUNGI

Septoria solidaginicola Pk.—Leaf spot (OS)
S. virgaurea Desm.—Leaf spot (OS)

S. altissima L.

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

S. bicolor L. Silverrod

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (OS)

S. caesia L. Blue-stem goldenrod

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (OS)
Puccinia dioicae Magn.—Rust (OS)

S. canadensis L. Canada goldenrod

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)
Coleosporium asterum (Diet.) Syd.—Rust (OS)
Puccinia dioicae Magn.—Rust (OS)

S. flexicaulis L. Zigzag goldenrod

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CINC)
Coleosporium asterum (Diet.) Syd.—Rust (OS)
Puccinia dioicae Magn.—Rust (OS)

S. gigantea Ait.

FUNGI

Coleosporium asterum (Diet.) Syd.—Rust (OS)

S. juncea Ait. Plume Early goldenrod
FUNG
Coleosporium asterum (Diet.) Syd.—Rust (Plant Dis. Rptr. 17:26)

S. nemoralis Ait. Gray goldenrod
FUNG
Coleosporium asterum (Diet.) Syd.—Rust (Ibid.)

S. patula Muhl. Rough-leaf goldenrod
FUNG
Erysiphe cichoracearum DC.—Powdery mildew (OS)
Coleosporium asterum (Diet.) Syd.—Rust (OS)

S. riddellii Frank Riddell's goldenrod
FUNG
Coleosporium asterum (Diet.) Syd.—Rust (OS)

S. rigida L. Stiff goldenrod
FUNG
Puccinia dioicae Magn.—Rust (OS)

S. rugosa Mill. Rough-leaved goldenrod
FUNG
Coleosporium asterum (Diet.) Syd.—Rust (OS)

S. speciosa Nutt.
FUNG
Coleosporium asterum (Diet.) Syd.—Rust (Plant Dis. Rptr. 17:26)

S. ulmifolia Muhl.
FUNG
Coleosporium asterum (Diet.) Syd.—Rust (OS)

Sonchus asper (L.) Hill Sowthistle
FUNG
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (OS)

Stokesia laevis (Hill) Greene Stokes-aster
FUNG
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

Tagetes sp. Marigold
BACTERIA
Pseudomonas sp.—Bacterial leaf spot (CWE) Plant Dis. 64:101
FUNG
Botrytis cinerea Pers.—Stem canker (C)
Fusarium sp.—Stem rot (C)
Pythium ultimum Trow—Root rot (AFS, C)
Sclerotium rolfsii Sacc. (Perf. St. *Athelia*)—Crown and stem rot (C)
N. Car. Agr. Sta. Tech. Bull. 174; CMI 410

Tannacetum vulgare L. Tansy
FUNG
Oidium sp.—Powdery mildew (CWE)

Taraxacum erythrospermum Andr.
FUNG
Puccinia hieracii (Rohl.) Mart.—Rust (OS)

T. officinale Weber Dandelion
FUNG
Puccinia hieracii (Rohl.) Mart.—Rust (OS)
Ramularia taraxici Karst.—Leaf spot (OS) Ellis & Ellis 1985
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (OS)
(May be *S. fuliginea*)

Tragopogon porrifolius L. Salsify
FUNG
Albugo tragopogonis (Pers.) S.F. Gray—White blister (OS) Ellis & Ellis 1985; CMI 458
Erysiphe cichoracearum DC.—Powdery mildew (OS)

Vernonia altissima Nutt. (V. gigantea L.) Ironweed
FUNG
Coleosporium vernoniae Berk. & Curt.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

V. fasciculata Michx. Ironweed
FUNG
Coleosporium vernoniae Berk. & Curt.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (OS)
Puccinia longipes Lagerh.—Rust (Plant Dis. Rptr. 25:195)

V. missurica Raf.
Coleosporium vernoniae Berk. & Curt.—Rust (CWE)

V. noveboracensis (L.) Michx.
FUNG
Cercospora noveboracensis Ell. & Ev.—Leaf spot (OS)
Coleosporium vernoniae Berk. & Curt.—Rust (OS)
Erysiphe cichoracearum DC.—Powdery mildew (OS)

Xanthium chinense Mill. (Appears to be a name not now accepted)
FUNG
Puccinia xanthii Schw.—Rust (Arthur 1934)

X. strumarium L. Common cocklebur
FUNG
Erysiphe cichoracearum DC.—Powdery mildew (OC, CWE)
Puccinia xanthii Schw.—Rust (OS)

Zinnia elegans Jacq. Zinnia
BACTERIA
Xanthomonas campestris pv. *zinniae* (Hopkins & Dawson) Dye—Leaf spot (CWE; Plant Dis. Rptr. 57:555)
FUNG
Alternaria zinniae Pape—Leaf and flower blight (OS) Ellis 1976
Botrytis cinerea Pers.—Gray mold stem rot (CWE)
Erysiphe cichoracearum DC.—Powdery mildew (OS, Ohio J. Sci. 66:570)

CONVOLVULACEAE

Convolvulus sepium L. Hedge bindweed
FUNG
Albugo ipomeae-panduratae (Schw.) Swing.—White rust or blister (OS) CMI 459
Puccinia convolvuli Cast.—Rust (OS)
Septoria convolvuli Desm.—Leaf spot (OS) Grove 1935

Ipomoea sp.
FUNG
Phyllosticta ipomoeae Ell. & Kell.—Leaf spot (North Amer. Flora 6:37)

I. batatas (L.) Lam. Sweet potato. General reference
Compendium of Sweet Potato Diseases. 1988.
American Phytopathological Society.
FUNG
Alternaria sp.—Storage rot (Althaus, M.Sc. Thesis, OSU 1951)

Diaporthe batatatis Harter & Field [Imp. St. *Phomopsis batatae* (Ell. & Halst.) Harter & Field]—Dry rot (Ibid.) USDA Tech. Bull. 99
Endoconidiophora fimbriata (Ell. & Halst.) Davidson (*Ceratocystis fimbriata* Ell. & Halst.)—Black rot (OS) CMI 41; Upadhyay 1981
Epicoccum sp.—Storage rot (Althaus, M.Sc. Thesis, OSU 1951)
Fusarium oxysporum Schlecht.—Surface rot (storage) (USDA Tech. Bull. 99)
F. oxysporum Schlecht. f. sp. *batatas* (Wollenw.) Snyder & Hans. Stem rot and wilt (Ibid.)
Moniliochaetes infuscans Ell. & Halst. ex Harter—Scurf (C; Jour. Agr. Res. 5:787)
Mucor sp.—Storage rot (Althaus M.Sc. Thesis, OSU 1951)
Nectria ipomoeae Halst. [*Hypomyces ipomoeae* (Halst.) Wollenw., Imp. St. *Fusarium solani* (Mart.) Sacc. emend. Snyder & Hans.]—Storage rot (PDI). See APS Compendium
Penicillium sp.—Blue-mold rot (Althaus, M.Sc. Thesis, OSU 1951)
Phyllosticta batatas (Thuem.) Cke.—Leaf spot (Plant Dis. Rptr. Sup. 3) USDA Tech. Bull. 99
Plenodomus destruens Harter—Basal stem rot (USDA Tech. Bull. 99)
Rhizoctonia solani Kuehn—Stem canker, root rot (OS, PDI)
Rhizopus stolonifer (Ehr. ex Fr.) Lind.—Soft rot (OAES Bull. 214)
Septoria bataticola Taub.—Leaf spot (OS) USDA Tech. Bull. 99

***I. hederacea* (L.) Jacq. Ivy-leaf morning-glory**

FUNGI

Albugo ipomoeae-panduratae (Schw.) Swing.—White rust or blister (OS) CMI 459

***I. lacunosa* L.**

FUNGI

Albugo ipomoeae-panduratae (Schw.) Swing.—White rust or blister (CWE) Ibid.

***I. pandurata* (L.) G.F.W. Mey. Wild sweet potato vine**

FUNGI

Albugo ipomoeae-panduratae (Schw.) Swing.—White rust or blister (CWE) Ibid.

***I. purpurea* (L.) Lam. Common morning-glory**

FUNGI

Cercospora ipomoeae Wint.—Leaf spot (CWE)
Coleosporium ipomoeae (Schw.) Burr.—Rust (CWE)

CORNACEAE

***Cornus* sp. Dogwood**

FUNGI

Ascochyta cornicola Sacc.—Leaf spot (PDI)

***C. alba* L. Tartarian dogwood**

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (Imp. St. *Dothiorella*)—Canker and dieback (CWE) Barr 1972; CMI 395. See Arx 1987 and Mycotaxon 30:117.
Phyllosticta cornicola (DC. ex Fr.) Rab.—Leaf spot (ODA)
Septoria cornicola Desm.—Leaf spot (OS) Ellis & Ellis 1985

***C. alternifolia* L. Pagoda dogwood**

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

***C. amomum* Mill. Silky dogwood**

FUNGI

Septoria cornicola Desm.—Leaf spot (OS) Ellis & Ellis 1985

***C. florida* L. Flowering dogwood**

FUNGI

Botrytis cinerea Pers.—Leaf blight (CWE)
Phyllactinia guttata (Fr.) Lev.—Powdery mildew (OS)
Phyllosticta cornicola (DC. ex Fr.) Rab.—Leaf spot (OS)
Septoria cornicola Desm.—Leaf spot (CWE) Ellis & Ellis 1985

NEMATODES

Xiphinema americanum Cobb—Dagger nematode (ODA)

***C. kousa* Hance Kousa dogwood**

No pathogens reported in Ohio

ABIOTIC

Iron deficiency—Chlorosis (OARDC Res. Cir. 263)

***C. racemosa* Lam. Gray dogwood**

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)
Septoria cornicola Desm.—Leaf spot (CWE) Ellis & Ellis 1985

***C. sericea* L. (*C. stolonifera* Michx.) Red-osier dogwood**

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot.—Canker and dieback (ODA) See *Cornus alba*.
Phyllactinia guttata (Fr.) Lev.—Powdery mildew (CWE, OS)
Septoria cornicola Desm.—Leaf spot (CWE, OS)

CRASSULACEAE

***Crassula argentea* Thunb. Jade plant**

FUNGI

Oidium sp.—Powdery mildew (CWE)

ABIOTIC

Environmental (soil temperatures and light intensity)—Oedema (CWE)

***Kalanchoe blossfeldiana* Poelln. Kalanchoe**

BACTERIA

Erwinia sp.—Soft rot (C)

FUNGI

Oidium sp.—Powdery mildew (CWE) Ohio J. Sci. 66:570; Strider, Vol. 2. 1985 (No fibrosin bodies, probably *Erysiphe* sp.)
Phytophthora sp. (? *P. parasitica* Dast.)—Stem rot (C)
Pythium splendens Braun—Root rot (C) CMI 120

***Sedum acre* L. Golden-carpet**

FUNGI

Oidium sp.—Powdery mildew (CWE) Ohio J. Sci. 66:570

CRUCIFERAE

***Alliaria officinalis* Andrz. Garlic mustard**

VIRUSES, VIROIDS, MYCOPLASMAS

Turnip mosaic virus (TurMV)—Mosaic (STN, CWE) Pl. Dis. 71:965-68.

***Arabis canadensis* L. Sickle-pod**

FUNGI

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (OSU Vasc. Plant Herbarium)

A. glabra (L.) Bernh. Tower mustard

FUNGI

Albugo cruciferarum S.F. Gray—White blister (rust) (OSU Vasc. Plant Herb.) Sydowia 9:339; CMI 460; Ohio J. Sci. 70:218

A. laevigata (Muhl.) Poir.

FUNGI

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (OSU Vasc. Plant Herb.) N.J. Agr. Exp. Sta. Bull. 313; Phytopathology 49:499

A. perstellata E.L. Br.

FUNGI

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (OSU Vasc. Plant Herb.) Ibid.

Armoracia rusticana (Lam.) Gaertner, B. Meyer & Scherbius Horseradish

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OS) Sydowia 9:339; CMI 460

Alternaria brassicae (Berk.) Sacc.—Leaf spot (Ill. Agr. Exp. Sta. Bull. 469) Ellis 1971; CMI 162

Cercospora armoraciae Sacc.—Leaf spot (OS)

Erysiphe polygoni DC.—Powdery mildew (OS)

Ramularia armoraciae Fckl.—Leaf spot (OS) Stevens 1913; Trans. Brit. Mycol. Soc. 44:33

Thielaviopsis basicola (Berk. & Br.) Ferr.—Black root rot (Report by Van Pelt, OAES, 1915)

Verticillium albo-atrum Reinke & Berth.—Wilt (C) CMI 255, 256

Barbarea vulgaris R. Br. Winter cress; yellow rocket

FUNGI

Cercospora barbareae (Sacc.) Chupp—Leaf spot (CWE)

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (CWE) Ohio J. Sci. 70:218

Ramularia barbareae Pk- Leaf spot (OS)

Brassica juncea (L.) Czerniak Mustard

BACTERIA

Xanthomonas campestris (Pam.) Dows.—Black rot (PDI)

FUNGI

Albugo cruciferarum S.F. Gray—White rust or blister (C) Sydowia 9:339; CMI 460

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (C) Walker 1952

Plasmiodiophora brassicae Wor.—Clubroot (PDI) Karling 1968; Walker 1952; CMI 621

B. kaber (DC.) Wheeler Wild mustard

FUNGI

Albugo cruciferarum S.F. Gray—White rust or white blister (OS) CMI 460

B. napus L. (Napobrassica group) Rutabaga

FUNGI

Erysiphe polygoni DC.—Powdery mildew (CWE)

B. nigra (L.) Koch Black mustard

FUNGI

Albugo cruciferarum S.F. Gray—White rust (OS) CMI 460; Sydowia 9:339

Alternaria brassicae (Berk.) Sacc.—Leaf spot (OS) Ellis 1971

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (OS) Walker 1952

B. oleracea L. (Acephala group) Collards, kale

FUNGI

Erysiphe polygoni DC.—Powdery mildew (CWE)

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (C, RCR) Walker 1952

Plasmiodiophora brassicae Wor.—Clubroot (RCR) Karling 1968; CMI 621

B. oleracea L. (Botrytis group) Broccoli, cauliflower

BACTERIA

Xanthomonas campestris (Pam.) Dows.—Black rot (C) Walker 1952

FUNGI

Alternaria sp.—Leaf spot (RCR)

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (RCR) Walker 1952

Phoma lingam (Tode ex Fr.) Desm.—Blackleg (C) Ibid., CMI 331

Plasmiodiophora brassicae Wor.—Clubroot (C) Karling 1968; Walker 1952; CMI 621

Rhizoctonia solani Kuehn—Wire stem, damping off (C, RCR)

B. oleracea L. (Capitata group) Cabbage

BACTERIA

Erwinia carotovora (L.R. Jones) Holland—Soft rot (Plant Dis. Rptr. Sup. 3)

Xanthomonas campestris (Pam.) Dows.—Black rot (OS) Walker 1952

FUNGI

Albugo cruciferarum S.F. Gray—White rust or white blister (PDI) Sydowia 9:339

Alternaria brassicae (Berk.) Sacc.—Gray leaf spot (OS) Ellis 1971; CMI 162

A. brassicola (Schw.) Wilt.—Black leaf spot (OS, CWE) Ibid.

Fusarium oxysporum Schlecht. f. *conglutinans* (Wr.) Snyder & Hans. -Yellows (OAES Bul. 228) Booth 1971; Nelson et al 1981; Walker 1952

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (OS) Walker 1952

Phoma lingam (Tode ex Fr.) Desm.—Blackleg (OS) OAES Bul. 228; Walker 1952; CMI 331

Plasmiodiophora brassicae Wor.—Clubroot (OS; OAES Bimonth. Bull. 167) Karling 1968; CMI 621

Pythium ultimum Trow—Seedling blight (C, AFS)

Rhizoctonia solani Kuehn—Seedling blight, wire-stem (RCR)

Sclerotinia sclerotiorum (Lib.) dBy.—Cottony rot (C, CWE) Myco-taxon 9:365

ABIOTIC

Phenoxy herbicide injury—Root malformation and stem galls (CWE) Has been confused with clubroot disease.

B. oleracea L. (Gemmifera group) Brussels sprouts

FUNGI

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (C)

Phoma lingam (Tode ex Fr.) Desm.—Blackleg (C) CMI 331

B. rapa L. (Chinensis group) Pak-choi, celery mustard

FUNGI

Alternaria brassicae (Berk.) Sacc.—Leaf spot (OS) Ellis 1971

B. rapa L. (Pekinensis group) Pe-tsai, chinese cabbage

BACTERIA

Erwinia carotovora (L.R. Jones) Holland—Soft rot (RCR)

FUNGI

Colletotrichum higginsianum Sacc.—Anthracnose (C) N. Car. Agr. Exp. Sta. Tech. Bul. 92

Plasmiodiophora brassicae Wor.—Clubroot (PDI) Karling 1968; CMI 621

B. rapa L. (Rapifera group) Turnip

BACTERIA

Erwinia carotovora (L.R. Jones) Holland—Soft rot (PDI)
Xanthomonas campestris (Pam.) Dows.—Black rot (USDA Yearbook 1906) Walker 1952

FUNGI

Alternaria brassicae (Berk.) Sacc.—Leaf spot and root rot (OS; Phytopath. 25:269) Ellis 1971, CMI 162
Erysiphe polygoni DC.—Powdery mildew (CWE)
Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (C) Walker 1952
Plasmodiophora brassicae Wor.—Clubroot (USDA Yearbook 1906) Karling 1968; CMI 621
Rhizoctonia solani Kuehn—Damping-off, root rot (PDI)

Cakile edentula (Bigel.) Hook. Sea-rocket

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OS) Sydowia 9:339 CMI 460

Camelina microcarpa Andrz. False flax

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OSU Vasc. Plant Herb.) Ibid.

C. sativa (L.) Crantz False flax

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OS) Ibid.

Capsella bursa-pastoris (L.) Medic. Shepherd's purse

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OS) Ibid.
Cylindrosporium capsellae Ell. & Ev.—Leaf spot (OS) Probably not a *Cylindrosporium*.
Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (OS) N.J. Agr. Exp. Sta. Bull. 313; Ohio J. Sci. 70:218

Cardamine bulbosa (Schreb.) BSP. Bulbous bitter cress

FUNGI

Albugo cruciferarum S.F. Gray—White blister (CWE, OS) CMI 460
Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (CWE, OS; Ohio J. Sci. 70:218)
Septoria dentariae Pk.—Leaf spot (CWE, OS)

C. douglassii (Torr.) Britt. Purple bitter cress

FUNGI

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (CWE, OS; Ohio J. Sci. 70:218)
Septoria dentariae Pk.—Leaf spot (CWE, OS)

C. pennsylvanica Muhl. Bitter-cress

FUNGI

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (OS; Ohio J. Sci. 70:218)

Crambe hispanica L.

FUNGI

Oidium sp.—Powdery mildew (CWE). On plants in demonstration plots, OSU farms.

Dentaria diphylla Michx. Two-leafed toothwort

FUNGI

Albugo cruciferarum S.F. Gray—White blister (CWE, OS) Sydowia 9:339; CMI 460

D. heterophylla Nutt. Various-leaved toothwort

FUNGI

Albugo cruciferarum S.F. Gray—White blister (CWE, OS) Ibid.
Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (CWE, OS; Ohio J. Sci. 70:218)

D. laciniata Muhl. Cut-leaved toothwort

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OS) CMI 460
Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (OS)

Descurainia pinnata (Walt.) Britt. Tansy mustard

FUNGI

Albugo cruciferarum S.F. Gray—White blister (Ohio J. Sci. 70:218) CMI 460

Erysimum repandum L. Treacle mustard

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OSU Vasc. Plant Herb.) Ibid.

Hesperis matronalis L. Dame's rocket

FUNGI

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (CWE, OS; Ohio J. Sci. 70:218)

VIRUSES, VIROIDS, MYCOPLASMAS

Tobacco mosaic virus—flower break+mosaic (STN, CWE)

Iodanthus pinnatifidus (Michx.) Steud. Purple rocket

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OS) CMI 460
Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (J. Columbus Hort. Soc. 11:1; Ann. Rpt. Ohio Acad. Sci. 4:18-23)

Lepidium campestre (L.) R. Br. Field pepper-grass

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OS; Ohio J. Sci. 70:218) CMI 460

L. virginicum L. Virginia pepper-grass

FUNGI

Albugo cruciferarum S.F. Gray—White blister (Ibid.) Ibid.
Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (OS)
Septoria lepidiicola Ell. & Martin—Leaf spot (OS)

Lobularia maritima (L.) Desv. Sweet alyssum

FUNGI

Rhizoctonia solani Kuehn—Root rot (Phytopath. 20:587)

Lunaria annua L. Money plant; honesty

FUNGI

Alternaria sp.—Leaf spot (CWE)

VIRUS

Tobacco mosaic virus+turnip mosaic virus—Mosaic (STN, CWE)

Matthiola incana (L.) R. Br. Common stock

BACTERIA

Pseudomonas sp.—Bacterial blight (Slutz, M.Sc. Thesis, OSU 1938)

FUNGI

Rhizoctonia solani Kuehn—Root rot (PDI)

Nasturtium officinale R. Br. Water cress

FUNGI

Cercospora nasturtii Pass.—Leaf spot (C, CWE, RMR)

Raphanus raphanistrum L. Wild radish

FUNGI

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (CWE; Ohio J. Sci. 70:218)

R. sativus L. Radish

BACTERIA

Xanthomonas campestris (Pam.) Dows.—Black rot (Plant Dis. Rptr. Sup. 3)

FUNGI

Albugo cruciferarum S.F. Gray—White rust or blister (OS) CMI 460; Sydowia 9:339

Alternaria raphani Groves & Skolko—Leaf & pod spot (PDI) Can. J. Res. C. 28:288-317

Aphanomyces raphani Kendr.—Black root (RCR) Scott 1961

Fusarium oxysporum Schlecht.—Yellows or wilt (Thayer M.Sc. Thesis, OSU 1955; Plant Dis. Rptr. 46:124; Gay, M.T. M.Sc. Thesis, OSU 1985)

Peronospora parasitica (Pers. ex Fr.) Fr.—Downy mildew (OS) Walker 1952

Plasmodiophora brassicae Wör.—Clubroot (OS, C) Plant Dis. 67: 758; CMI 621

Pythium aphanidermatum (Edson) Fitz.—Root or hypocotyl rot (PDI) CMI 36

Rhizoctonia solani Kuehn—Root and hypocotyl rot; scurf (RCR)

Streptomyces scabies (Thaxt.) Waksman & Henrici—Scab (PDI) Waksman 1967

NEMATODES

Meloidogyne hapla Chitwood 1949—Root knot (RMR)

Rorippa islandica (Oeder) Borbas Yellow cress

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OS; Ohio J. Sci. 70: 218) CMI 460

Sisymbrium altissimum L. Tumble mustard

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OSU Vasc. Plant Herb.) Ibid.

S. officinale (L.) Scop. Hedge mustard

FUNGI

Albugo cruciferarum S.F. Gray—White blister (OS) Ibid.
Septoria sisymbrii Ell.—Leaf spot (CWE)

CUCURBITACEAE

Bryonopsis laciniosa (L.) Naud.

FUNGI

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (OS) CMI Mycol. Paper No. 148

Citrullus lanatus (Thunb.) Matsum. & Nakai (C. vulgaris Schrad.) Watermelon

FUNGI

Alternaria cucumerina (Ell. & Ev.) Elliott—Leaf blight (OS) Ellis 1971
Cercospora citrullina Cke.—Leaf spot (Ohio Agr. Exp. Sta. Bull. 105) CMI 917

Colletotrichum orbiculare (Berk. & Mont.) Arx [*C. lagenarium* (Pass.) Ell. & Halst.]—Anthracnose leaf blight and fruit rot (OS, CWE) Arx, 1970

Didymella (See *Mycosphaerella*)

Diplodia sp.—Stem end rot (PDI)

Fusarium oxysporum Schlecht.—Wilt (CWE) Booth 1971; Nelson et. al. 1981

Mycosphaerella melonis (Pass.) Chiu & Walker [*M. citrullina* (C.O. Sm.)

Gross; *Didymella bryoniae* (Auersw.) Rehm; Imp. St. *Ascochyta cucumis* Fautr. & Roum.]—Gummy stem blight (PDI) CMI 332; Fungi Canadenses 303

Phytophthora capsici Leonian—Fruit and stem rot (C) CMI 836

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (OS) CMI Mycol. Paper No. 148

Verticillium alboatrum Reinke & Berth.—Wilt (Joaquim, M.Sc. Thesis, OSU 1986)

NEMATODES

Meloidogyne hapla Chitwood—Root knot (RMR)

Coccinea sp. Gourd

FUNGI

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (OS) CMI Mycol. Paper No. 148

Cucumis anguria L.

FUNGI

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (OS) Ibid.

C. melo L. Muskmelon

BACTERIA

Erwinia tracheiphila (E.F. Sm.) Holland — Bacterial wilt (C, CWE), CMI 233

FUNGI

Alternaria cucumerina (Ell. & Ev.) Elliott—Leaf blight (OS, CWE) Ellis 1971; CMI 244

Cladosporium cucumerinum Ell. & Arth.—Leaf and fruit scab; gummosis (OS) Ellis 1971; CMI 348

Colletotrichum orbiculare (Berk. & Mont.) Arx [*C. lagenarium* (Pass.) Ell. & Halst.] —Anthracnose leaf blight and fruit rot (OS, CWE) Arx 1970

Erysiphe cichoracearum DC. (Reported, but not verified)

Fusarium oxysporum Schlecht.—Wilt (PDI, CWE)

Fusarium sp.—Fruit rot (PDI, JDW)

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (OS) CMI Mycol Paper No. 148

Rhizoctonia solani Kuehn—Damping-off (C)

Sclerotium rolfsii Sacc.—Southern blight (Plant Dis. Rptr. Sup.3) N. Car. Agr. Exp. Sta. Tech. Bull. 174

Sphaerotheca fuliginea (Schlecht.) Poll.—Powdery mildew (CWE; Ohio J. Sci. 66:570)

NEMATODES

Meloidogyne hapla Chitwood—Root knot (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Squash mosaic virus—Squash mosaic (STN) CMI/AAB No. 43

C. sativus L. Cucumber

BACTERIA

Erwinia tracheiphila (E.F. Sm.) Holland — Bacterial wilt (C, CWE, RCR) CMI 233

Pseudomonas syringae pv. *lachrymans* (Smith & Bryan) Young et. al.—Angular leaf spot (OS, CWE) Phytopath 67:730; CMI 124

FUNGI

Alternaria cucumerina (Ell. & Ev.) Elliott — Leaf blight (OS) Ellis 1971; CMI 244

Botrytis cinerea Pers.— Gray mold, stem canker (PDI, RCR, Ohio Coop. Ext. Serv. Bull. 718)

Cercospora citrullina Cke.—Leaf spot (Ohio Agr. Exp. Sta. Bull. 214) Chupp 1953; Ellis 1976; CMI 917

Cladosporium cucumerinum Ell. & Arth.—Scab of foliage and fruit (OS) Ellis 1971; CMI 348

Colletotrichum orbiculare (Berk. & Mont.) Arx [*C. lagenarium* (Pass.) Ell. & Halst.] —Anthracnose leaf and fruit spot (OS) Sutton 1980

Erysiphe cichoracearum DC. (Reported, but not verified. See *Sphaerotheca*)

Fusarium sp.—Fruit rot (PDI)

Fusarium oxysporum Schlecht.—Wilt (CWE)
Leandria momordica Rangel (*Stemphylium cucurbitacearum* Osner)
 Net spot (J. Agr. Res. 13:295) Plant Dis. 67:534
Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (OS, CWE) Ohio Agr. Exp. Sta. Bull. 89; CMI Mycol. Paper No. 148
Pythium debaryanum Hesse—Damping-off (USDA Bull. 1366) Not now considered a valid species. See Stud. Mycol. 21:1-242
P. ultimum Trow—Damping-off, wilt (Ohio Coop. Ext. Serv. Bull. 718; Chen, M.Sc. Thesis OSU, 1984)
Rhizoctonia solani Kuehn—Damping-off; fruit rot (CWE)
Sclerotium rolfsii Sacc. (Perf. St. *Athelia*)—Southern blight (Plant Dis. Rptr. Sup. 3) North Carolina Agr. Exp. Sta. Tech. Bull. 174
Sphaerotheca fuliginea (Schlecht.) Poll.—Powdery mildew (CWE; Ohio J. Science 66:570)
Verticillium albo-atrum Reinke & Berth.—Wilt (PDI) CMI 255, 256

NEMATODES

Meloidogyne hapla Chitwood—Root knot (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Beet pseudoyellows virus—Beet pseudoyellows (Ohio Coop. Ext. Serv. Bull. 718)
 Cucumber mosaic virus—Mosaic (CWE; Ohio Coop. Ext. Serv. Bull. 718) CMI/AAB No. 213

Cucurbita maxima Dcne. Autumn and winter squash

BACTERIA

Erwinia tracheiphila (E.F. Sm.) Holland—Bacterial wilt (Plant Dis. Rptr. Sup. 3)

FUNGI

Choanephora cucurbitarum (Berk. & Rav.) Thaxt.—Blossom blight and fruit rot (J. Agr. Res. 8:319; C) Mycologia 47:702
Colletotrichum orbiculare (Berk. & Mont.) Arx—Anthracnose (C; Plant Dis. Rptr. Sup. 22)
Erysiphe cichoracearum DC.—Powdery mildew (Reported but not confirmed as this species)
Fusarium sp.—Fruit rot (Althaus, M.Sc. Thesis, OSU 1951)
Mycosphaerella melonis (Pass.) Chiu & Walker—Black rot, gummy stem blight (C) See *Citrullus*
Phytophthora capsici Leonian—Fruit rot (C) CMI 836
Sphaerotheca fuliginea (Schlecht.) Poll.—Powdery mildew (CWE; Ohio J. Sci. 66:570)

C. pepo L. Pumpkin; summer squash

BACTERIA

Erwinia tracheiphila (E.F. Sm.) Holland—Bacterial wilt (Plant Dis. Rptr. Sup. 3) CMI 233

FUNGI

Alternaria sp.—Fruit rot (Althaus, M.Sc. Thesis, OSU 1951)
Colletotrichum orbiculare (Berk. & Mont.) Arx (*C. lagenarium*) Anthracnose fruit rot (C) Arx 1970
Erysiphe cichoracearum DC. (Reported but not verified). See *Sphaerotheca*
Leandria momordica Rangel (*Stemphylium cucurbitacearum* Osner) Net spot—leaves and stems (PDI) Plant Dis. 67:534
Mycosphaerella melonis (Pass.) Chiu & Walker—Gummy stem blight (C) CMI 332. See *Citrullus*
Phytophthora capsici Leonian—Fruit rot (C) CMI 836
Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (OS) CMI Mycol. Paper No. 148
Sphaerotheca fuliginea (Schlecht.) Poll.—Powdery mildew (CWE; Ohio J. Sci. 66:570)

VIRUSES, VIROIDS, MYCOPLASMAS

Zucchini yellow mosaic virus—Zucchini yellow mosaic (Plant Dis. 70:801) CMI/AAB No. 282

Echinocystis lobata (Michx.) Torr. & Gray Wild cucumber

FUNGI

Cercospora echinocystis Ell. & Martin—Leaf spot (OS)

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (OS)

Lagenaria siceraria (Mol.) Standl. Gourd

FUNGI

Colletotrichum orbiculare (Berk. & Mont.) Arx—Fruit rot (CWE; Plant Dis. Rptr. 41:370)

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (OS)

Luffa acutangula (L.) Roxb. Gourd

FUNGI

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (OS)

Melothria scabra Naud.

FUNGI

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (PDI)

Momordica balsamina L. Balsam-apple

FUNGI

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (Bot. Gaz. 27:67)

M. charantia L. Balsam pear

FUNGI

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (Ibid.)

Sechium edule (Jacq.) Swartz Chayote

FUNGI

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (Ibid.)

Sicyos angulatus L. Bur-cucumber

FUNGI

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (Ibid.)

Trichosanthes anguina L. Snakegourd

FUNGI

Pseudoperonospora cubensis (Berk. & Curt.) Rostow.—Downy mildew (OS)

CUPRESSACEAE

Chamaecyparis sp.

FUNGI

Pestalotiopsis sp.—On needles and twigs; ? saprophytic (CWE)

Juniperus spp. Junipers, red cedar

FUNGI

Antrodia juniperina (Murr.) Niem. & Ryv.—Brown cubical heart rot (Gilbertson & Ryvarden 1986)

Pestalotiopsis sp.—On dead or senescing tissues (CWE)

Phomopsis occulta (Sacc.) Trav.—On dead tissues (CWE) Trans. Brit. Mycol. Soc. 15:32-92. See note under *J. chinensis*

J. chinensis L. Chinese juniper

FUNGI

Phomopsis juniperovora Hahn—Tip blight; dieback (C) Trans. British Mycol. Soc. 15:32-92; CMI 370; Peterson 1981. Some of the reports of *Phomopsis* blight are questionable. See Wheeler et al. 1981.

Insects and Mites of Pennsylvania Junipers, Penn. Dept. Agr., Bur. Plant Industry. Also some reports may be *P. occulta*, a saprophyte. (Trans. Brit. Mycol. Soc. 15:32). Also see Mycologia 54:62-69 for fungi on needles and stems of *Juniperus*.

***J. communis* L. Common juniper**

FUNGI

Gymnosporangium clavariiforme (Pers.) DC. — Fusiform stem swellings, rust canker (PDI) Fungi Canadenses No. 115; Kern 1973
G. clavipes (Cke. & Pk.) Cke. & Pk.—Fusiform stem swellings, rust (PDI) Fungi Canadenses No. 116; Kern 1973
Phomopsis juniperovora Hahn—Tip blight (OARDC Res. Cir. 139 rev.) See *J. chinensis*

***J. horizontalis* Moench Creeping juniper**

FUNGI

Kabatina juniperi Schneider & von Arx [*K. thujae* var. *juniperi* (Schneider & von Arx) Morelet]—Tip blight (C) Sutton 1980; CMI 489
Phomopsis juniperovora Hahn—Tip or twig blight (C) See *J. chinensis*

***J. sabina* L. Savin juniper**

FUNGI

Phomopsis juniperovora Hahn—Tip blight (C) See *J. chinensis*
Phytophthora cinnamomi Rands—Root and crown rot (C)

***J. scopulorum* Sarg. Rocky Mt. juniper**

FUNGI

Gymnosporangium juniperi-virginianae Schw.—Cedar-apple rust gall (CWE) Fungi Canadenses No. 137; Kern 1973
Phomopsis juniperovora Hahn—Tip blight (C) See *J. chinensis*

***J. virginiana* L. Red cedar**

FUNGI

Gymnosporangium clavipes (Cke. & Pk.) Cke. & Pk.—Rust (C, CWE) Kern 1973; Fungi Canadenses No. 116
G. globosum Farl.—Rust gall (OS) Kern 1973
G. juniperi-virginianae Schw.—Rust gall (OS) Kern 1973; Fungi Canadenses No. 137
G. nidus-avis Thaxt.—Rust gall & witches-broom (Ohio Nat. 13:29) Kern 1973
Phomopsis juniperovora Hahn—Tip blight (C) See *J. chinensis*

***Platyclusus orientalis* (L.) Franco (*Thuja orientalis* L.) Oriental arborvitae**

FUNGI

Pestalotia sp. (*Pestalotiopsis*)—On needles, ? saprobic (CWE) Guba 1961; Sutton 1980

***Thuja occidentalis* L. American arborvitae**

FUNGI

Pestalotia sp. (*Pestalotiopsis*)—On needles and twigs; ? blight (CWE) Sutton 1980; Guba 1961
Phomopsis juniperovora Hahn—Twig and needle blight (PDI) CMI 370; Trans. Brit. Mycol. Soc. 15:32-92

CYPERACEAE

***Carex comosa* Booth**

FUNGI

Puccinia bolleyana Sacc.—Rust (OS)

***C. cristatella* Britt.**

FUNGI

Uromyces perigynius Halst.—Rust (OS)

***C. emoryi* Dewey**

FUNGI

Puccinia caricina DC.—Rust (OS)

***C. frankii* Kunth.**

FUNGI

Puccinia bolleyana Sacc.—Rust (OS)

***C. hirtifolia* Mackenzie**

FUNGI

Puccinia caricina DC.—Rust (OS)

***C. lacustris* Willd.**

FUNGI

Puccinia caricina DC.—Rust (OS)

***C. limosa* L.**

FUNGI

Puccinia caricina DC. var. *limosae* (P. Magn.) Jorst.—Rust (Arthur 1934)

***C. lupulina* Muhl.**

FUNGI

Puccinia bolleyana Sacc.—Rust (OS)

***C. lurida* Wahl.**

FUNGI

Puccinia bolleyana Sacc.—Rust (OS)

***C. pennsylvanica* Lam.**

FUNGI

Schizonella melanogramma (DC.) Schroet.—Leaf smut (OS)

***C. scoparia* Schk.**

FUNGI

Puccinia dioicae P. Magn.—Rust (OS)

***C. squarrosa* L.**

FUNGI

Puccinia caricina DC.—Rust (OS)

***C. stipata* Muhl.**

FUNGI

Puccinia dioicae Magn.—Rust (OS)

***C. torta* Boott**

FUNGI

Puccinia caricina DC.—Rust (OS)

***C. trichocarpa* Muhl.**

FUNGI

Puccinia bolleyana Sacc.—Rust (Arthur 1934)
P. dioicae Magn.—Rust (OS)

***C. virescens* Muhl.**

FUNGI

Puccinia caricina DC.—Rust (Arthur 1934)

***C. vulpinoidea* Michx.**

FUNGI

Puccinia dioicae Magn.—Rust (Arthur 1934)

Cyperus esculentus L. Yellow nutgrass

FUNGI

Puccinia canaliculata (Schw.) Lagerh.—Rust (Arthur 1934)
Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis OSU 1977)

C. strigosus L. Straw-colored cyperus

FUNGI

Puccinia canaliculata (Schw.) Lagerh.—Rust (OS)
P. cyperi Arth.—Rust (OS)

Eleocharis sp. Spikerush

FUNGI

Puccinia eleocharidis (Fckl.) Schroet.—Rust (PDI)

Eriophorum sp. Cottongrass

FUNGI

Puccinia angustata Pk.—Rust (OS)

E. virginicum L. Cottongrass

FUNGI

Puccinia angustata Pk.—Rust (OC)

Rhynchospora alba (L.) Vahl Beakrush

FUNGI

Uromyces rhynchosporae Ell.—Rust (OS)

R. glomerata (L.) Vahl Beakrush

FUNGI

Uromyces rhynchosporae Ell.—Rust (Arthur 1934)

Scirpus atrovirens Muhl. Bulrush

FUNGI

Puccinia angustata Pk.—Rust (OS)

S. cyperinus (L.) Kunth

FUNGI

Puccinia angustata Pk.—Rust (OS)

S. fluviatilis (Torr.) Gray River bulrush

FUNGI

Puccinia angustata Pk.—Rust (OS)
Uromyces lineolatus (Desm.) Schroet.—Rust (OS)

DIOSCOREACEAE

Dioscorea sp. Yam

FUNGI

Cercospora dioscoreae Ell. & Martin—Leaf spot (Chupp 1953)
Septoria dioscoreae Ell. & Martin—Leaf spot (Plant Dis. Rptr. 27:26)

DIPSACACEAE

Dipsacus sylvestris Mill. Common teasel

FUNGI

Cercospora elongata Pk.—Leaf spot (OS, CWE)

Scabiosa caucasica Bieb. Per. Pincushion flower

FUNGI

Oidium sp.—Powdery mildew (OS, CWE)

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

S. fischeri DC.

FUNGI

Oidium sp.—Powdery mildew (CWE)

S. japonica Miq.

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

EBENACEAE

Diospyros virginiana L. Common persimmon

FUNGI

Cercospora fuliginosa Ell. & Kell.—Leaf spot (C, CWE)
Rhizopus stolonifer (Ehr. ex Fr.) Vuill.—Fruit rot (C)

ELAEAGNACEAE

Elaeagnus angustifolia L. Russian olive

FUNGI

Phomopsis arnoldiae Sutton [*P. elaeagni* (Carter & Sacamano) Arnold & Carter] — Canker and dieback (White & Ellett. 1972. Plant Dis. Rptr. 56:995) Can. Plant Dis. Survey 53:183; Sutton 1980
Phyllosticta argyrea Speg.—Leaf spot (CWE)
Verticillium albo-atrum Reinke & Berth.—Wilt (C, CWE) CMI 255, 256; Rev. Plant Pathol. 53:157

EQUISETACEAE

Equisetum hyemale L. Scouring rush

FUNGI

Gloeosporium equiseti Ell. & Ev. [*Titaeospora equiseti* (Desm.) Vassl.; Perf. St. *Staminaria equiseti* (Hoffm.) Sacc.]—Anthracnose (OS) Sutton 1980; Arx 1970

ERICACEAE

Andromeda glaucophylla Link Bog rose-mary

FUNGI

Exobasidium vaccinii Wor.—Leaf gall (OS) Can. J. Bot. 37:641

Epigaea repens L. Trailing arbutus

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS; Ohio J. Sci. 66:570)

Gaultheria procumbens L. Teaberry

FUNGI

Mycosphaerella gaultheriae (Cke. & Ell.) House—Leaf spot (OS)
Schizothyrium gaultheriae (Curt. ex. Ell. & Ev.) Hoehn.—Black speck (OS)

Gaylussacia baccata (Wang.) K. Koch Huckleberry

FUNGI

Exobasidium vaccinii Wor.—Leaf gall (OS) Can. J. Bot. 37:641; CMI 778
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)
Pucciniastrum vaccinii (Wint.) Jorst.—Rust (5th Ann. Rpt. Ohio Acad. Sci.)

***Kalmia latifolia* L. Mountain laurel**

FUNGI

Cercospora kalmiae Ell. & Ev.—Leaf spot (OS)
Mycosphaerella colorata (Pk.) Earle [Imp. St. *Phyllosticta kalmicola* (Schw.) Cke.]—Leaf spot (OS) Barr 1972
Phomopsis kalmiae Enlows—Leaf blotch (OS)
Septoria kalmicola (Schw.) Berk. & Curt.—Leaf spot (OS)

***Leucothoe fontanesiana* (Stand.) Sleum. Drooping leucothoe**

FUNGI

Guignardia leucothoes (Cke.) Lind.—Leaf spot (ODA)
Oidium sp. (Probably *Microsphaera penicillata*)—Powdery mildew (CWE; OS)
Phyllosticta terminalis Ell. & Martin—Leaf spot (ODA; C)

***Pieris japonica* (Thumb.) D. Don Japanese Pieris**

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (Imp. St. *Dothiorella* sp.)—Dieback (Phytopath. 64:1368-1370) Barr 1972; CMI 395; See Sutton 1980; Arx 1987; Mycotaxon. 30:117
Pestalotia sydowiana Bres. (*Pestalotiopsis*)—From leaves and stems, weak parasite (Ibid.) Guba 1961; Sutton 1980
Phomopsis sp.—From leaves and stems (Ibid.)
Phytophthora cactorum (Leb. & Cohn.) Schroet.—Dieback (AFS) CMI 111
P. cinnamomi Rands—Root and crown rot (Phytopath. 64:1368) APS Monograph No.10
P. citricola Sawada—Crown and stem rot (Ibid.) CMI 114
P. citrophthora (Sm. & Sm.) Leonian — Stem and crown rot (Phytopath. 66:302) CMI 33
P. lateralis Tucker & Milbrath—From leaves (Ibid.)

***Rhododendron* spp. Azalea and rhododendron.** **Most of the pathogens listed are on cultivated azaleas and rhododendrons. Those on azalea only are indicated by (A) and from rhododendron only by (R). General reference—Compendium of Rhododendron and Azalea Diseases, 1986. American Phytopathological Society.**

BACTERIA

Agrobacterium tumefaciens (E.F. Sm. & Towns.) Conn (R) —Crown gall (Phytopath. 53:870)

FUNGI

Botrytis cinerea Pers. (A)—Flower blight (PDI)
Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (Imp. St. *Dothiorella* sp.)—Dieback, canker (Plant Dis. Rptr. 48:207) Barr 1972; CMI 395; See Arx 1987 for taxonomy of *Botryosphaeria*
Cercospora handelii Bub. [*Cercoseptoria handelii* (Bub.) Deighton]—Leaf spot (CWE, OS) Ellis 1976; Ellis & Ellis 1985
Cylindrocladium floridanum Sob. & Szym.—Cutting rot (Plant Dis. Rptr. 52:615) Mycologia 61:957; CMI 421
C. scoparium Morgan (A)—Cutting rot (Ibid.) Ibid.; CMI 362
Exobasidium vaccinii Wor. (A)—Leaf and stem gall (C; CWE) Can. J. Bot. 37:641
Microsphaera penicillata (Wallr.) Lev. (A)—Powdery mildew (OS)
Pestalotia spp. (*Pestalotiopsis* spp.) — Cutting rot, and from stems and leaves; ? saprophytic (C, CWE) Guba 1961; Sutton 1980
Phomopsis sp.—Dieback
Phyllosticta maxima Ell. & Ev. [Perf. St. *Guignardia rhododae* (Cke.) B.H. Davis] (R)—Leaf spot (CWE) Mycologia 38:48
Phytophthora cactorum (Leb. & Cohn) Schroet. (R)—Dieback, crown and root rot (Phytopath. 64:1371-1374) CMI 111
P. cinnamomi Rands (R)—Crown and root rot (Ibid.) American Phytopathological Society Monograph No. 10, 1980
P. citricola Sawada (R)—Root and crown rot (Ibid.) CMI 114
P. citrophthora (Sm. & Sm.) Leonian (R)—From stems (Ibid.) CMI 33
P. cryptogea Pethyb. & Laff. (R)—Root rot (Ibid.) CMI 592
P. lateralis Tucker & Milbrath (R)—Crown rot (Ibid.)

P. megasperma Drechs. (R)—From rooted cuttings (Ibid.) CMI 115
P. parasitica Dast. (A) — Dieback (Ibid.) Plant Dis. Rptr. 49:235; CMI 35
Pucciniastrum vaccinii (Wint.) Jorst. [*P. myrtilli* (Schum.) Arth.] (A)—Leaf rust (ODA; CWE) Ziller, 1974
Pythium carolinianum Matthews (R)—From roots (Phytopath. 64:1371-1374)
P. irregulare Buis.—From roots (Ibid.; AFS)
P. splendens Braun (R)—From roots (Ibid.) CMI 120
P. vexans dBy (R)—From roots (Ibid.)
Septoria azaleae Vogl. (A)—Leaf spot (OS; CWE)

NEMATODES

Tylenchorhynchus sp. (R)—Stunt nematode (RMR)

ABIOTIC

Boron toxicity—Leaf yellowing and necrosis (E.M. Smith, OARDC Res. Cir. 263)
Iron deficiency—Interveinal chlorosis (OCES Bull. 658)

***Vaccinium angustifolium* Ait. Lowbush blueberry**

FUNGI

Exobasidium vaccinii Wor.—Leaf and shoot gall (OS) Can. J. Bot. 37:641

***V. corymbosum* L. Highbush blueberry**

BACTERIA

Agrobacterium tumefaciens (E.F. Sm. & Town.) Conn—Crown gall

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (Imp. St. *Dothiorella*)—Canker (ODA) See *Pieris*
Botrytis cinerea Pers.—Gray-mold blossom blight (MAE)
Fusicoccum putrefaciens Shear (Perf. St. *Godronia cassandrae* Pk.)—Stem canker (MAE) Phytopath. 19:1017
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)
Monilinia vaccinii-corymbosi (Reade) Honey—Mummyberry, blossom blight (C) Phytopath. 67:848
Pucciniastrum vaccinii (Wint.) Jorst.—Leaf rust (ODA; PK; CWE) Ziller 1974

NEMATODES

Pratylenchus penetrans (Cobb) Filipjev & Stekhoven—Lesion nematode (RMR)

ABIOTIC

Iron or manganese deficiency—Chlorosis (OCES Bull. 458)

***V. macrocarpon* Ait. Large cranberry**

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (PDI)

***V. oxycoccus* L. Small cranberry**

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

***V. stamineum* L. Deerberry**

FUNGI

Rhytisma vaccinii Schw. ex Fr.—Tar spot (OS; CWE)

***V. vacillans* Torr. Lowbush blueberry**

FUNGI

Exobasidium vaccinii Wor.—Leaf and shoot gall (WBC) Can. J. Bot. 37:641
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

EUPHORBIACEAE

***Acalypha rhomboidea* Raf. Three-seeded mercury**

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS, CWE)

A. virginica L.

FUNGI

Cercospora acalyphae Pk.—Leaf spot (OS)

Euphorbia corollata L. Flowering spurge

FUNGI

Microsphaera euphorbiae (Pk.) Berk. & Curt.—Powdery mildew (OS)
Puccinia panicl Diet.—Rust (OS)

E. dentata Michx. Toothed spurge

FUNGI

Microsphaera euphorbiae (Pk.) Berk. & Curt.—Powdery mildew PDI
Uromyces euphorbiae Cke. & Pk.—Rust (OS)

E. humistrata Engelm. Hairy spreading spurge

FUNGI

Uromyces euphorbiae Cke. & Pk.—Rust (OS)

E. maculata L. Spotted spurge

FUNGI

Uromyces euphorbiae Cke. & Pk.—Rust (OS)

E. pulcherrima Willd. Poinsettia (General reference—Strider Vol. 2, 1985)

BACTERIA

Erwinia chrysanthemi Burkholder et al.—Cutting rot; stem rot (Plant Dis. Rptr. 56:480)

FUNGI

Botrytis cinerea Pers. (Perf. St. *Botryotinia*) — Bract blight (CCP)
Pythium aphanidermatum (Eds.) Fitz.—Stem and root rot (AFS) CMI 36
P. ultimum Trow—Stem and root rot (C; Alexander, M.Sc. Thesis, OSU 1955; Fungicide and Nematicide Test Results 1973)
Rhizoctonia solani Kuehn—Cutting rot; root rot (Ibid.)
Thielaviopsis basicola (Berk. & Br.) Ferr.—Root and crown rot (CWE) CMI 170

VIRUSES, VIROIDS, MYCOPLASMAS

Poinsettia mosaic virus—Mottle of bracts (STN) Phytopath. Z. 107:250; CMI/AAB 311

Pedicularis tithymaloides (L.) Port. Slipper plant

FUNGI

Sphaerotheca fuliginea (Schlecht.) Poll. - Powdery mildew on plants in greenhouse (Ohio J. Sci. 66:570; CWE)

FAGACEAE

Castanea dentata (Marsh.) Borkh. American chestnut

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (Imp. St. Dothiorella)—On twigs (PDI) Barr 1972
Clitocybe illudens Schw. [*Omphalotus olearius* (DC. ex Fr.) Sing.]—Wood rot (PDI) Miller 1972
Coryneum sp.—On dead branches (PDI)
Cryphonectria parasitica (Murr.) Barr [*Endothia parasitica* (Murr.) P.J. & H.W. Anderson]—Blight and canker (OS) Barr 1978; APS Monograph Series 1986. Chestnut blight, other *Endothia* Diseases and the Genus *Endothia*; Mycologia 79:23-37; CMI 704
Cryptodiaporthe castanea (Tul.) Wehm. (Imp. St. *Fusicoccum* c. Sacc.)—Stem canker (PDI) Wehmeyer 1933
Daedalea quercina L. ex Fr.—Heart rot (Overholts 1914) Overholts 1953
Endothia parasitica—See *Cryphonectria*
E. radicalis (Schw. ex Fr.) Wint.—On stems (PDI) Barr 1978
Fomes everhartii (Ell. & Gall.) v. Schrenk (*Phellinus*)—Heart rot (OS) Overholts 1953

Gloeosporium ochroleucum (Berk. & Curt.) Ellis & Everh. [*Marssonina ochroleuca* (Berk. & Curt.) Lentz]—Brown-bordered leaf spot (OS) Arx 1970 places this species in *Discella*
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)
Panus spp.—Sapwood rot of slash (PDI)
Phyllactinia guttata (Fr.) Lev.—Powdery mildew (OS)
Polyporus spp.—Wood rots (PDI)
Steccherinum adustum (Schw.) Banker (*Mycorrhapium*)—Sapwood rot (PDI) Coker & Beers 1951

C. mollisma Blume Chinese chestnut

FUNGI

Cryptodiaporthe castanea (Tul.) Wehm. (Imp. St. *Fusicoccum* c.) Canker (OS, CWE) Wehmeyer 1933
Endothia parasitica (Murr.) P.J. & H.W. Anderson—Canker (OARDC Res. Cir. 139, rev.) Barr 1978; APS Monograph Series 1986. Chestnut blight, other *Endothia* Diseases, and the Genus *Endothia*, American Phytopathological Society Press; CMI 704; *Cryphonectria* is the currently accepted genus.

C. sativa Mill. Spanish chestnut

FUNGI

Endothia parasitica (Murr.) P.J. & H.W. Anderson—Canker (PDI) Ibid.
Phyllactinia guttata (Fr.) Lev.—Powdery mildew (Ohio Nat. 10:76)

Fagus grandifolia Ehrh. American beech

FUNGI

Armillaria mellea (Vahl. ex Fr.) Kumm.—Root and butt rot (FB, PDI) Miller 1972; CMI 321 (*Armillariella* of some authorities)
Daedalea quercina L. ex Fr.—Brown cubical heart rot (FB, PDI) Overholts 1953
Endothia gyrosa (Schw.) Fr.—On exposed roots (PDI) Barr 1978; APS Monograph Series 1986. Chestnut blight, other *Endothia* Diseases and the Genus *Endothia*, American Phytopathological Society Press
Fomes connatus (Weinm.) Gill. [*Oxyporus populinus* (Schum. ex Fr.) Donk]—Wood decay (OS) Overholts 1953
F. fomentarius (Fr. ex Fr.) Kickx—Sapwood and heart rot (PDI) Ibid.
F. ohioensis (Berk.) Murr.—On dead wood (OS)
Hericium coralloides (Scop. ex Fr.) S.F. Gray—Wood decay (CWE) Coker & Beers 1951; Michigan Botanist 12:178
Hypoxyton mediterraneum (deNot.) Ces. & deNot. [*Nummularia clypeus* (Schw.) Cke.]—On dead branches (PDI) Miller 1961; See J.S. Afr. Bot. 35:312
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)
Phyllactinia guttata (Fr.) Lev.—Powdery mildew (Ibid.)
Phyllosticta faginea Pk.—Leaf spot (N. Amer. Flora 6:23; PDI)
Polyporus dryophilus Berk. [*Inonotus d.* (Berk.) Murr.]—Trunk rot (PDI) Overholts 1953
P. graveolens (Schw.) Fr.—Heart rot (Plant Dis. Rptr. 25:198; OS) Ibid.
P. spraguei Berk. & Curt.—Heart rot (OS) Ibid.
Scorias spongiosa (Schw.) Fr.—Sooty mold associated with aphid infestation (CWE) Hepting 1971
Steccherinum adustum (Schw.) Banker —Sapwood rot (PDI) Coker & Beers 1951. In genus *Mycorrhapium* by some authorities.
S. ochraceum (Pers. ex Fr.) Gray—Wood rot (WBC) Ibid.
Stereum fasciatum (Schw.) Fr. [*S. ostrea* (Blume) Fr.]—Wood rot (WBC) USDA Agr. Monograph 24
S. fuscum (Schrad.) Karst. [*S. bicolor* (Pers.) Fr.]—Wood rot (PDI) Ibid. In genus *Laxitextum* of some authorities.
Ustulina vulgaris Tul. [*Hypoxyton deustum* (Hoffm.) Grev.]—Heart rot (FB) Miller 1961; CMI 360

PARASITIC SEED PLANTS

Conopholis americana (L.) Wallr.—Squawroot, cancer root; root parasite (CWE) Fernald, 1950. Gray's Manual of Botany
Epifagus virginiana (L.) Bart.—Beech drops (CWE) —On roots (Ibid.)

INSECTS, MITES

Acalitus fagerinea (Kiefer)—Erineum (CWE) May be mistaken for a disease. USDA Agr. Handbook 573

***Fagus sylvatica* L. European beech**

FUNGI

Armillaria mellea (Vahl. ex Fr.) Kummer—Root & butt rot (PDI) Miller 1972; CMI 321
Phomopsis sp.—Canker, dieback (CWE)

***Quercus* sp. Oak**

FUNGI

Botryodiplodia sp.—From twigs (C)
Botryosphaeria quercuum (Schw.) Sacc. [*Phyalospora glandicola* (Schw.) Stevens; Imp. St. ? *Botryodiplodia*] — Twig blight (C) Barr 1972
Endothia gyrosa (Schw. ex Fr.) Fr.—On exposed roots and branches (USDA Bull. 380) Barr 1978; APS Monograph Series 1986. See entry under *Castanea*.
Fusicoccum sp.—Twig blight (CWE)
Polyporus berkeleyi (Fr.) Sing.—White stringy heart rot (Overholts 1914) Overholts 1953
P. dryophilus Berk. (*Inonotus d.*)—Wood rot (Overholts, 1914) Ibid.
Steccherinum ochraceum (Pers. ex Fr.) Gray—Wood rot (WBC)
Urnula craterium (Schw.) Fr. (Imp. St. is *Strumella* which causes a canker on oaks) Apothecia of *Urnula* common on fallen dead wood of oak (CWE) Mycologia 42:735

PARASITIC SEED PLANTS

Conopoholis americana (L.) Wallr.—Squawroot, cancer-root; root parasite (CWE) Fernald 1950. Gray's Manual of Botany.

***Q. acutissima* Carruth. Sawtooth oak**

FUNGI

Fusicoccum sp.—Twig blight (CWE) Ill. Nat. Hist. Survey Bull. Vol. 21:195

***Q. alba* L. White oak**

FUNGI

Apiognomonina quercina (Kleb.) v. Hohnel [*Gnomonia quercina* Kleb.; Imp. St. *Discula quercina* (West.) Arx; *Gloeosporium quercinum* West.]—Anthracnose leaf blight (OS; C) Barr 1978; Phytopath. 57:1230
Aleurodiscus oakesii (Berk. & Curt.) Hohn & Litsch.—Bark patch Can. J. Bot. 42:213
Armillaria mellea (Vahl. ex Fr.) Kumm.—Root & butt rot (FB) Miller 1972. *Armillariella* of some authorities.
A. tabescens (Scop. ex Fr.) Emel.—Root & butt rot (CWE) Ibid.
Ascochybe grovesii D.E. Wells—Wood stain (FB)
Ceratocystis fagacearum (Bretz) Hunt (Imp. St. *Chalara*) —Oak wilt (GJB) Upadhyay 1981
Daedalea quercina L. ex Fr.—Wood rot (PDI) Overholts 1953
Daldinia concentrica (Bolt ex Fr.) Ces. & deNot.—Sapwood rot (PDI)
Favolus alveolaris (DC. ex Fr.) Quel.—On dead wood (CWE) Miller 1972
Fomes connatus (Weinm.) Gill. (*Oxyporus populinus*) —Heart rot (PDI) Overholts 1953
F. everhartii (Eil. & Gall.) Schrenk & Spauld. (*Phellinus*)—Heart rot (PDI) Ibid.
F. ignarius (L. ex Fr.) Kickx (*Phellinus*)—White heart rot (PDI) Ibid., CMI 194
Ganoderma applanatum (Pers. ex Wallr.) Pat.—Heart rot (PDI) Ibid., CMI 443
Hericium erinaceus (Bull. ex Fr.) Pers.—Butt & heart rot (FB) Coker & Beers 1951
Hypoxylon sp.—? canker, or saprophytic (ODNR)
Irpex mollis Berk. & Curt. (*Spongiopellis pachydora*)—White spongy heart rot (FB)
Laetiporus sulfureus (Bull. ex Fr.) Bond. & Sing. (*Polyporus sulfureus*)—Brown cubical wood rot (FB) Miller 1972; Overholts 1953; CMI 441
Lenzites betulina (L. ex Fr.) Fr.—Brown cubical sapwood rot (PDI) Overholts 1953
Marssonina martini (Sacc. & Eil.) Magn.—Brown-bordered leaf spot (OS) N.J. Agr. Exp. Sta. Bull. 313
Merulius tremellosus Schrad. ex Fr.—Wood rot (FB)
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

Monochaetia monochaeta (Desm.) Allescher (*M. desmazieri* Sacc.)—Leaf spot (Guba 1961)

Phlebia chrysocrea (Berk. & Curt.) Burds.—Wood decay (FB) Mycologia 67:495

Polyporus compactus Overholts—White rot (FB) Overholts 1953

P. frondosus (Dicks.) Fr. (*Grifola*)—Heart and butt rot (FB) Ibid.

P. versicolor (L.) Fr. (*Coriolus*)—Wood rot (FB) Ibid.

Poria andersonii (Eil. & Ev.) Neuman (*Inonotus*)—Heart rot and canker rot (FB) Lowe 1966

P. cocos (Schw.) Wolf—Brown root and butt rot (FB) Ibid.

Stereum complicatum (Fr.) Fr. (*S. rameale* Schw.)—On wood (FB) USDA Agr. Monograph 24

S. frustulatum (Pers. ex Fr.) Fckl.—White pocket wood rot (FB) Ibid.

Xylabulus of some authorities

S. fuscum (Schrad.) Karst. [*S. bicolor* (Pers.) Fr.]—Wood rot (PDI) Ibid.

Laxitextum of some authorities

S. gausapatum (Fr.) Fr.—White pocket rot (FB) Ibid. *Haematostereum* of some authorities

S. hirsutum (Willd. ex Fr.) Gray—Wood rot (PDI) Ibid.

Strumella coryneoidea Sacc. & Wint. [Perf. St. *Urnula craterium* (Schw.) Fr.]—Canker (PDI) Mycologia 42:735; USDA Forest Pest Leaflet 101

Taphrina caeruleascens (Mont. & Desm.) Tul.—Leaf blister (PDI) Mix 1949. Not common on the white oak group.

Xylaria sp.—On wood (FB)

ABIOTIC

Iron deficiency—Chlorosis (E.M. Smith, OARDC Res. Cir. 263)

***Q. bicolor* Willd. Swamp white oak**

FUNGI

Apiognomonina quercina (Kleb.) v. Hohnel [*Gnomonia quercina* Kleb.; Imp. St. *Discula quercina* (West.) Arx]—Anthracnose leaf blight (CWE) See *Q. alba*

Ceratocystis fagacearum (Bretz) Hunt —Oak wilt (GJB) Upadhyay 1981

Fusicoccum sp.—Twig canker (CWE, C)

Hymenochaete sp.—From wood (PDI)

***Q. coccinea* Muenchh. Scarlet oak**

FUNGI

Apiognomonina quercina (Kleb.) v. Hohn. [*Gnomonia quercina* Kleb.; Imp. St. *Discula quercina* (West.) Arx]—Anthracnose leaf blight (CWE) See *Q. alba*

Armillaria mellea (Vahl ex Fr.) Kumm. (*Armillariella*)—Root rot (PDI) Miller 1972

Botryodiplodia ravenellii Sacc.—Twig blight (PDI) Phytopath. 5:197

Ceratocystis fagacearum (Bretz) Hunt (Imp. St. *Chalara*)—Oak wilt (GJB) Upadhyay 1981

Coriolus versicolor (L. ex Fr.) Quel. (*Polyporus versicolor* L. ex Fr.)—Wood decay (FB) Overholts 1953

Cronartium quercuum (Berk.) Miyabe ex Shirai—Pine-oak gall rust; leaf rust (OS)

Fistulina hepatica Schaeff. ex Fr.—Wood decay (FB) Miller 1972

Hericium erinaceus (Bull. ex Fr.) Pers.—Heart & butt rot (FB) Coker & Beers 1951; Mich. Bot. 12:178

Hymenochaete rubiginosa (Schrad. ex Fr.) Lev.—Wood decay (FB)

Hypoxylon mediterraneum (deNot.) Ces. & deNot. [*Nummularia clypeus* (Schw. Cke.)—On branches (PDI) Miller 1961; See J. South African Bot. 35:312

Laetiporus sulfureus (Bull. ex Fr.) Bond. & Sing. (*Polyporus sulfureus* Bull. ex Fr.) —Brown cubical rot (FB) Miller 1972; Overholts 1953; CMI 441

Marssonina ? *quercina* (Wint.) Lentz—Leaf spot (PDI, C)

Merulius tremellosus Schrad. ex Fr.—Wood rot (FB)

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS, NFC)

Monochaetia desmazieri Sacc.—Leaf blotch (PDI) Guba 1961. See *Q. alba*

Phlebia chrysocrea (Berk. & Curt.) Burds.—White mottled heart rot (FB) Mycologia 67:495

Pleurotus ostreatus (Jacq. ex Fr.) Kumm.—Wood rot (FB) Miller 1972

Polyporus adustus (Willd.) Fr.—Wood decay (FB) Overholts 1953

P. compactus Overholts—White rot (FB) Ibid.

P. frondosus (Dicks.) Fr. (*Grifola*)—Butt rot; decay (FB) Ibid.

P. graveolens (Schw.) Fr.—Heart rot (PDI) Ibid.

P. spraguei Berk. & Curt.—Friable brown rot (FB) Ibid.
Poria andersonii (Ell. & Ev.) Neuman (*Inonotus*)—White spongy heart rot (FB) Lowe 1966
P. oleracea Davidson & Lombard—Wood decay (FB) Ibid.
Stereum frustulatum (Pers. ex Fr.) Fckl.—White pocket rot (FB) USDA Agr. Monograph 24. *Xylobolus* of some authorities
S. gausapatum (Fr.) Fr.—White pocket or mottled rot (FB) Ibid.
Taphrina caerulescens (Desm.) Tul.—Leaf blister (C, ODA) Mix 1949
Trametes morgani Llyod—Wood decay (PDI)
Tubakia dryina (Sacc.) Sutton [*Actinopelte dryina* (Sacc.) Hohn.]—Leaf blotch (CWE) Trans. British Mycol. Soc. 60:164; Mycotaxon 29:101

Q. imbricaria Michx. Shingle oak

FUNGI

Apiognomonia quercina (Kleb.) Hohn.—Anthracnose leaf blight. See *Q. alba*
Cronartium quercuum (Berk.) Miyabe ex Shirai—Pine-oak gall rust; leaf rust (OS)
Fusicoccum sp.—Twig blight; canker (OS, CWE)
Marssonina (? *quercina*) (Wint.) Lentz—Leaf spot (PDI) Arx 1970; Mycologia 42:263

Q. lyrata Walt. Overcup oak

FUNGI

Apiognomonia quercina (Kleb.) Hohn.—Anthracnose leaf blight (CWE)
 See *Q. alba*

Q. macrocarpa Michx. Bur oak

FUNGI

Armillaria sp.—Root and butt rot (ODNR)
Ceratocystis fagacearum (Bretz) Hunt—Oak wilt (GJB)
Gnomonia quercina (Kleb.) Hohn.—Anthracnose (C) See *Q. alba*
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS, MU)
Taphrina caerulescens (Mont. & Desm.) Tul.—Leaf blister (PDI) Mix 1949

Q. marilandica Muenchh. Blackjack oak

FUNGI

Marssonina sp.—Leaf spot (OS)
Phyllactinia guttata (Fr.) Lev.—Powdery mildew (OS)

Q. muehlenbergii Engelm. Yellow chestnut oak

FUNGI

Marssonina (? *quercina*) (Wint.) Lentz—Leaf spot (PDI) Arx 1970; Mycologia 42:263
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)
Tubakia dryina (Sacc.) Sutton (*Actinopelte*)—Leaf spot (OS) Trans. British Mycol. Soc. 60:164; Mycotaxon 29:101
Venturia orbicula (Schw.) Cke. & Pk.—On fallen leaves (OS)

Q. palustris Muench. Pin oak

FUNGI

Actinopelte (See *Tubakia*)
Ceratocystis fagacearum (Bretz) Hunt (Imp. St. *Chalara*)—Oak wilt (C, GJB) Upadhyay 1981
Fusicoccum ellisianum Sacc. & Syd.—Twig blight (C, CWE) Ill. Nat. History Survey Vol. 21:195
Ganoderma lucidum (Curt. ex Fr.) Karst.—Butt rot (CWE) Overholts 1953; CMI 445
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)
Phyllactinia guttata (Fr.) Lev.—Powdery mildew (OS)
Taphrina caerulescens (Desm.) Tul.—Leaf blister (OS, C) Mix 1949
Tubakia dryina (Sacc.) Sutton [*Actinopelte dryina* (Sacc.) Hohn.]—Leaf spot (C, CWE) Trans. British Mycol. Soc. 60:114; Mycotaxon 29:101

ABIOTIC

Iron deficiency—Chlorosis (E.M. Smith, OARDC Res. Cir. 263)

Q. phellos L. Willow oak

FUNGI

Fusicoccum sp.—Twig blight (CWE)

ABIOTIC

Iron deficiency—Chlorosis (E.M. Smith, OARDC Res. Cir. 263)

Q. prinus L. Chestnut oak

FUNGI

Ceratocystis fagacearum (Bretz) Hunt —Oak wilt (GJB) Upadhyay 1981
Fomes everhartii (Ell. & Gall.) Schrenk. & Spauld. (*Phellinus*)—Wood decay (PDI) Overholts 1953
Hericium erinaceus (Bull. ex Fr.) Pers.—Pocket rot; wood decay (FB) Coker & Beers 1951
Irpex mollis Berk. & Curt.—White spongy heart rot (FB)
Marssonina (? *martini*) (Sacc. & Ell.) Magn.—Leaf spot (C) Mycologia 42:263; Arx 1970
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)
Polyporus compactus Overholts—White heart rot (FB) Overholts 1953
P. dryophilus Berk. (*Inonotus*)—Wood rot (FB) Ibid.
Poria andersonii (Ell. & Ev.) Neuman [*Inonotus a.* (Ell. & Ev.) Cerny]—White spongy heart rot (FB) Lowe 1966
P. cocos (Schw.) Wolf—Brown root and butt rot (FB) Ibid.
Rigidoporus vitreus (Pers. ex Fr.) Donk (*Poria*)—Wood rot (FB)
Stereum frustulatum (Pers. ex Fr.) Fckl. (*Xylobolus*)—White pocket rot (FB) USDA Agr. Monograph 24
S. gausapatum (Fr.) Fr.—White pocket or mottled rot (FB) Ibid. (*Haematostereum* of some authorities)
Venturia orbicula (Schw.) Cke. & Pk.—On fallen leaves (OS)

Q. robur L. English oak

FUNGI

Marssonina (? *martini*) (Sacc. & Ell.) Magn.—Leaf spot (CWE) Arx 1970
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (C; Ohio J. Sci. 66:570)

Q. rubra L. Red oak

FUNGI

Ceratocystis fagacearum (Bretz) Hunt (Imp. St. *Chalara*)—Oak wilt (C, GJB) Upadhyay 1981
Coriolus versicolor (L. ex Fr.) Quel. (*Polyporus v. L.* ex Fr.)—Wood rot (FB) Overholts 1953
Coryneum sp.—? dieback (C) Ill. Bull. Nat. Hist. Survey, v. 21:195
Cronartium quercuum (Berk.) Miyabe ex Shirai—Pine-oak gall rust; leaf rust (OS)
Daedalea quercina L. ex Fr.—Brown cubical rot (PDI) Overholts 1953
Diplodia longispora Cke. & Ell.—Twig blight (PDI)
Dothiorella sp.—? twig blight (C) Ill. Nat. Hist. Survey 21:195
Fomes fraxinophilus (Pk.) Cke.—Wood rot (FB) Overholts 1953
Fusicoccum ? *ellisianum* Sacc. & Syd.—Twig blight (CWE) Bull. Ill. Nat. Hist. Survey Vol. 21:195
Hypoxylon sp.—? canker, or saprophytic (ODNR)
Laetiporus sulfureus (Bull. ex Fr.) Bond. & Sing.—Brown cubical rot (FB) Miller 1972; Overholts 1953; CMI 441
Marssonina (? *quercina*) (Wint.) Lentz —Leaf spot (OS, CWE) Arx 1970; Mycologia 42:263
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS, MU, NFC)
Monochaetia desmazieri Sacc.—Leaf blotch (PDI) Guba 1961
Phyllactinia guttata (Fr.) Lev.—Powdery mildew (OS)
Polyporus compactus Overholts—White rot (FB) Hall, Ph.D. Dissertation OSU 1981; Overholts 1953
P. dryadeus Pers. ex Fr.—Butt rot (PDI, CWE) Overholts 1953
P. graveolens Schw. (Fr.)—Wood rot (PDI) Ibid.
Poria cocos (Schw.) Wolf—Brown root & butt rot (FB) Lowe 1966; USDA Tech. Bull. 785
P. oleracea Davidson & Lombard—Brown cubical rot (FB) Ibid.
Stereum frustulatum (Pers. ex Fr.) Fckl.—White pocket wood rot (FB) USDA Agr. Monograph 24. *Xylobolus* of some authorities.
Taphrina caerulescens (Desm.) Tul.—Leaf blister (C) Mix 1949

Tubakia dryina (Sacc.) Sutton [*Actinopelte d.* (Sacc.) Hohn.]—Leaf spot (CWE) Trans. British Mycol. Soc. 60:114; Mycotaxon 29:101

ABIOTIC

Iron deficiency — Chlorosis; interveinal scorch (E.M. Smith, OARDC Res. Cir. 263)

Q. shumardii Buck. Shumard's red oak

FUNGI

Fusicoccum ellisianum Sacc. & Syd.—Twig canker (CWE, ODA) Bull. Ill. Nat. History Survey Vol. 21:195

Marssonina (?*quercina*) (Wint.) Lentz—Leaf spot (CWE)

Q. stellata Wang. Post oak

FUNGI

Marssonina sp.—Leaf spot (OS)

Polyporus dryophilus Berk. (*Inonotus*) —Wood rot (FB) Overholts 1953
Stereum frustulatum (Pers. ex Fr.) Fckl. (*Xylobolus*)—White pocket rot (FB) USDA Agr. Monograph 24

Taphrina caerulescens (Mont. & Desm.) Tul.—Leaf blister (PDI) Mix 1949

Q. velutina Lam. Black oak

FUNGI

Apiognomonina quercina (Kleb.)y. Hohnel. (See *Q. alba*) Anthracnose leaf blight (CWE, PDI)

Armillaria mellea (Vahl. ex Fr.) Kumm.—Butt & root rot (FB) Miller 1972; CMI 321

Ceratocystis fagacearum (Bretz) Hunt (Imp. St. *Chalara*)—Oak wilt (GJB) Upadhyay 1981

Coriolus versicolor (L. ex Fr.) Quel. (*Polyporus*)—Wood decay (FB) Overholts 1953

Hericium erinaceus (Bull. ex Fr.) Pers.—White pocket rot (FB) Coker & Beers 1951; Mich. Bot. 12:178

Hymenochaete rubiginosa (Dicks.) Fr.—Wood rot (FB)

Hypoxylon mediterraneum (deNot.) Ces. & deNot. [*Nummularia clypeus* (Schw.) Cke.]—On dead wood (PDI) Miller 1961

Irpex mollis Berk. & Curt.—White spongy heart rot (FB)

Laetiporus sulfureus (Bull. ex Fr.) Bond. & Sing.—Brown cubical rot (FB) Miller 1972; Overholts 1953; CMI 441

Marssonina (?*quercina*) (Wint.) Lentz —Leaf spot (C) Arx 1970; Mycologia 42:263

Merulius tremellosus Schrad. ex Fr.—Wood rot (FB)

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS, NFC)

Monochaetia desmazieri Sacc.—Leaf blotch (PDI) Guba 1961

Phlebia chrysocrea (Berk. & Curt.) Burds.—White rot (FB) Mycologia 67:495

Polyporus adustus Willd. ex Fr.—Wood rot (FB) Overholts 1953

P. compactus Overholts—White rot (FB) Ibid.

P. graveolens (Schw.) Fr.—Wood rot (PDI) Ibid.

P. spraguei Berk. & Curt.—Brown friable rot (FB) Ibid.

Poria andersonii (Ell. & Ev.) Neum.—White spongy wood rot (FB) Lowe 1966

P. cocos (Schw.) Wolf—Brown root & butt rot (FB) Ibid.

P. nigra (Berk.) Cke.—Brown wood rot (FB) Ibid.

Septoria ? *querceti* Thum.—Leaf spot (WBC) Mycologia 29:434

Steccherinum setulosum (Berk. & Curt.) L.W. Miller—White wood rot (FB) Mycologia 27:362

Stereum complicatum (Fr.) Fr.—White rot (FB) USDA Agr. Monograph 24

S. frustulatum (Pers. ex Fr.) Fckl. (*Xylobolus*)—White pocket rot (FB) Ibid.

S. gausapatum (Fr.) Fr.—White pocket or mottled rot (FB) Ibid.

Strumella coryneoidea Sacc. & Wint. [Perf. St. *Urnula craterium* (Schw.) Fr.]—Canker (CWE) Mycologia 42:735

Taphrina caerulescens (Desm.) Tul.—Leaf blister (C., OS, CWE) Mix 1949

FUMARIACEAE

Corydalis sempervirens (L.) Pers. Rock-harlequin

FUNGI

Fusarium sp.—Wilt (C)

Peronospora corydalis dBy.—Downy mildew (6th Ann. Rept. Ohio Acad. Sci.)

Dicentra canadensis (Goldie) Walp Squirrel-corn

FUNGI

Peronospora corydalis dBy.—Downy mildew (OS, CWE)

D. cucullaria (L.) Bernh. Dutchman's-breeches

FUNGI

Cerotelium dicentrae Mains & H.W. Anderson—Rust (OS)

Peronospora corydalis dBy.—Downy mildew (OS)

D. spectabilis DC. Bleedingheart

FUNGI

Rhizoctonia solani Kuehn—Root rot (C)

GENTIANACEAE

Exacum affine Balf. Persian violet

FUNGI

Botrytis cinerea Pers.—Stem canker, blight (C)

Menyanthes trifoliata L. Bogbean

FUNGI

Septoria menyanthis Desm.—Leaf spot (OS)

Gentiana andrewsii Griseb. Closed gentian

FUNGI

Puccinia gentianae (Strauss) Lk.—Rust (OS)

Sabatia angularis (L.) Pursh Rose pink

FUNGI

Cercospora sabbatae Ell. & Ev.—Leaf spot (OS)

GERANIACEAE

Geranium carolinianum L. Carolina geranium

FUNGI

Plasmopara geranii (Farl.) Berl. & de Toni—Downy mildew (CWE; OS; Ohio J. Sci. 70:218)

G. maculatum L. Spotted geranium, cranesbill

FUNGI

Cercospora geranii Kell. & Swing.—Leaf spot (OS)

Erysiphe polygoni DC.—Powdery mildew (NFC)

Pestalotiella subsessilis Sacc. & Ellis — Leaf spot (OS, CWE) Sutton 1980

Plasmopara geranii (Farl.) Berl. & de Toni—Downy mildew (OS; Ohio J. Sci. 70:218)

Puccinia polygoni-amphibii Pers.—Rust (OS)

Ramularia geranii (West.) Fckl.—Leaf spot (Plant Dis. Rptr. 27:26)

Seaverinia geranii (Seaver & Horne) Whet.—Rhizome rot (CWE) Seaver 1951

Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (OS)

G. sanguineum L. Bloodred cranesbill

FUNGI

Oidium sp.—Powdery mildew (CWE)

***Pelargonium x hortorum* Bailey Florist's geranium.**
General references— Geraniums III, 3rd Ed. 1982.
 Penn. Flower Growers, Univ. Park, PA; Cornell Univ.
 Ext. Information Bull. 201, 1985

BACTERIA

- Agrobacterium tumefaciens* (E.F. Sm. & Towns.) Conn—Crown gall (Plant Dis. Rptr. Sup. 50)
Corynebacterium fascians (Tilford) Dows.—Fasciation (CWE) J. Agr. Research 53:383-394
Xanthomonas campestris pv. *pelargonii* (Brown) Dye —Leaf blight and stem rot (OS, C) Strider 1985; Daugherty, M.Sc. Thesis, OSU 1968; Phytopath. 64:1081

FUNGI

- Botrytis cinerea* Pers. (Perf. St. Botryotinia) — Leaf blight, blossom blight, cutting rot (OS, C) Strider 1985
Cercospora brunckii Ell. & Gall.— Leaf spot on *Pelargonium* sp. (OS)
Puccinia pelargonii-zonalis Doidge — Rust (C; Ohio Florists' Assoc. Bull. 510) CMI 266
Pythium spp.—Blackleg, cutting rot (C)
P. irregulare Buis.—Root and cutting rot, blackleg (AFS)
P. ultimum Trow—Blackleg (C, AFS)
P. vexans dBy.—Blackleg, cutting rot (AFS)
Rhizoctonia solani Kuehn—Seedling blight (CCP)
Sclerotinia sclerotiorum (Lib.) dBy.—Seedling blight (CCP)
Verticillium albo-atrum Reinke & Berth.—Wilt (C) CMI 255, 256; Rev. Plant Pathol. 53:157

VIRUSES, VIROIDS, MYCOPLASMAS

- Cucumber mosaic virus (CMV)—Mosaic (STN) CMI/AAB No. 213
 Viruses—Mosaic, leaf crinkle and curl symptoms observed frequently on *Pelargonium*. Other than CMV, specific viruses have not been identified. Cornell Agr. Ext. Information Bull. 201. See addendum for recent records.

ABIOTIC

- Oedema—Unbalanced water relations (CWE) Florists' Review 152:64

***P. peltatum* (L.) L'Her. ex Ait. Ivy geranium**

BACTERIA

- Xanthomonas campestris* pv. *pelargonii* (Brown) Dye —Leaf blight and stem rot (PDI, CWE)

FUNGI

- Botrytis cinerea* Pers.—Leaf and blossom blight, gray mold (CWE)
Pythium irregulare Buis.—Root rot (AFS)

ABIOTIC

- Oedema—Unbalanced water relations (CWE) Florists' Review 152:64

GESNERIACEAE

***Achimenes* sp.**

FUNGI

- Oidium* sp.—Powdery mildew (CWE) On experimental plants in greenhouse. Ohio J. Sci. 66:570

***Saintpaulia ionantha* H. Wendl. St. Paulia or African violet**

FUNGI

- Botrytis cinerea* Pers.—Gray mold (CWE)
Cylindrocarpon sp.—From roots, crown; ?pathogenic (C) CMI Mycol. Paper 104
Phytophthora parasitica Dast.—Crown rot (CWE, AFS) Strider, Vol. 2 1985; CMI 35
Pythium sp.—Root rot (C)
Sphaerotheca sp.—Powdery mildew (CWE) No cleistothecia but identified from conidial characters

NEMATODES

- Aphelenchoides fragariae* Ritzema-Bos—Foliar nematode (RMR)

- Meloidogyne hapla* Chitwood—Root knot (RMR)

ABIOTIC

- Environmental—Ring spot (CWE) Strider, Vol. 2, 1985

***Sinningia speciosa* Benth. & Hook. Gloxinia**

FUNGI

- Botrytis cinerea* Pers.—Gray mold (CWE)
Myrothecium roridum Tode ex Fr.—Stem rot (C) CMI 253; CMI Mycol. Paper No. 130
Oidium sp.—Powdery mildew (C; CWE)
Phytophthora parasitica Dast.—Crown rot (C, AFS) Strider, Vol. 2 1985; CMI 35
Pythium sp.—From roots (C)
Rhizoctonia solani Kuehn—Root, crown rot (C)

VIRUSES, VIROIDS, MYCOPLASMAS

- Tomato spotted wilt virus (TSWV)—Spotted wilt (STN) CMI/AAB No. 39

***Smithiantha fulgida* (Ortg.) Voss. Temple-bells**

FUNGI

- Oidium* sp.—Powdery mildew (CWE) On experimental plants in greenhouse. Ohio J. Sci. 66:570

***Streptocarpus* sp. Cape primrose**

FUNGI

- Botrytis cinerea* Pers.—Gray mold (C)

GINKGOACEAE

***Ginkgo biloba* L. Ginkgo, maidenhair tree**

FUNGI

- Botryosphaeria* sp.—? Canker (CWE)
Phyllosticta ginkgo Brun.—Leaf spot (PDI)

GRAMINEAE

***Agropyron repens* (L.) Beauv. Quackgrass**

BACTERIA

- Xanthomonas campestris* pv. *translucens* (Jones et al.) Dye Black-chaff and leaf blight (OS; CWE)

FUNGI

- Ascochyta* ? *sorghii* Sacc.—Leaf spot (CWE) CMI Mycol. Paper 142
Claviceps purpurea (Fr.) Tul. (Imp. St. *Sphacelia*)— Ergot (OS) Bove 1970
Erysiphe graminis DC.—Powdery mildew (CWE)
Phyllachora graminis (Pers.) Fckl.—Tar spot (OS; Daft, M.Sc. Thesis, OSU 1961) Mycologia 36:18; Aust. J. Bot. 11:117 and 15:211
Puccinia graminis Pers.—Stem rust (OS)
P. recondita Rob. ex Desm.—Leaf rust (OS)
Septoria elymi Ell. & Ev.—Leaf spot (OS)
Urocystis agropyri (Preuss) Schroet.—Leaf smut (CWE) CMI 716

VIRUSES, VIROIDS, MYCOPLASMAS

- Maize dwarf mosaic virus—Maize dwarf mosaic (Abt, M.Sc. Thesis, OSU 1983)

***Agrostis alba* L. Redtop**

FUNGI

- Claviceps* sp.—Ergot (PDI)
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS)
Drechslera erythrosipila (Drechs.) Shoem. (*Helminthosporium* e.)— Leaf spot (Sprague 1950)
Puccinia graminis Pers.—Rust (OS)
P. recondita Rob. ex Desm.—Leaf rust (Daft, M.Sc. Thesis, OSU 1961)

Rhizoctonia solani Kuehn—Brown patch, root rot (Sprague 1950)
Urocystis agropyri (Pruess) Schroet.—Flag smut (Daft, M.Sc. Thesis, OSU 1961) CMI 716

A. canina L. Velvet bentgrass (This species is not reported in Ohio in current check lists of grasses.)

FUNGI

Tilletia pallida G.W. Fisch.—Head smut (Fischer 1953)

A. hyemalis (Walt.) BSP.

FUNGI

Puccinia recondita Rob. ex Desm.—Leaf rust (PDI)

A. palustris Huds. Creeping bentgrass. General references Compendium of Turfgrass Diseases, 1983. American Phytopathological Society; Couch 1973.

BACTERIA

Xanthomonas campestris pv. *palustris*—Bacterial wilt (Golf Course Management 52:33) Plant Dis. 65:1014

FUNGI

Bipolaris sorokiniana (Sacc.) Shoem.—Leaf spot (POL)
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (WWS)
Drechslera catenaria (Drechs.) Ito —Leaf blight and crown rot (Plant Dis. 65:79-81)
Laetisaria fuciformis (McAlp.) Bursdall [*Corticium fuciforme* (Berk.) Wakef; Imp. St. *Isaria fuciformis* Berk.]—Red thread (POL) Can. J. Bot. 60:529
Pythium aphanidermatum (Edson) Fitz.—Foliar blight (Plant Dis. 64:1100) CMI 36
P. graminicola Subr.—Foliar blight (Phytopath. 64:252)
P. torulosum Coker & Patterson—Decline (Ibid.)
P. vanterpoolii V. & H. Kouyeas—Foliar blight (Ibid.)
Rhizoctonia cerealis van der Hoeven (Perf. St. *Ceratobasidium cereale* Murray & Burpee) —Yellow patch (BJ, POL) Trans. Brit. Mycol. Soc. 82:170
R. solani Kuehn [Perf. St. *Thanatephorus cucumeris* (Frank) Donk]—Brown patch (POL, PDI) CMI 406
R. zeae Voorhees—Brown patch (WWS) Phytopath. 24:1290
Sclerophthora macrospora (Sacc.) Thirum., Shaw, & Naras.—Downy mildew (POL)
Sclerotinia homoeocarpa F.T. Bennett—Dollar patch (POL, BJ) CMI 618. Not a *Sclerotinia*, but it has not been placed in another genus.
Typhula sp.—Gray snow mold (BJ)

NEMATODES

Criconeimella xenoplax (Raski) Luc & Raski (*Criconeimoides*)—Ring nematode (RMR; Plant Dis. Rptr. 60:405) Rev. Nematol. 4:3-21

A. perennans (Walt.) Tuckerm. Autumn bentgrass

FUNGI

Puccinia recondita Rob. ex Desm.—Leaf rust (Arthur 1934)

A. tenuis Sibth. Colonial or Rhode Island bentgrass

FUNGI

Pythium aphanidermatum (Edson) Fitz.—Foliar blight (Saladini, Ph.D. Dissertat., OSU 1976) CMI 36
P. graminicola Subr.—Foliar blight (Amer. Phytopath. Soc. Abst. 2:26; Saladini, Ph.D. Dissertat. OSU 1976)
Rhizoctonia solani Kuehn—Brown patch (PDI)
Sclerotinia homoeocarpa F.T. Bennett—Dollar patch (POL) CMI 618.
 See *A. palustris*
Typhula sp.—Gray snow mold (BJ)
Ustilago striiformis (West.) Niessl—Stripe smut (CWE) CMI 717

Alopecurus geniculatus L. Water foxtail

FUNGI

Cercosporidium graminis (Fckl.) Deighton (*Scolecotrichum* g. Fckl.)—Leaf streak, spot (OS) Sprague 1950; Ellis & Ellis 1985

Ammophila breviligulata Fern. Beachgrass

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (OS)

Andropogon gerardii Vitm. Big bluestem

FUNGI

Phyllachora luteo-maculata (Schw.) Orton —Tar spot (Plant Dis. Rptr. 25:191)
Sphacelotheca seymouriana Clinton—Seed smut (OS; Ohio J. Sci. 59:313)

A. scoparius Michx. Little bluestem

FUNGI

Puccinia andropogonis Schw.—Rust (OS)
Sorosporium ellisii Wint.—Inflorescence smut (OS; Ohio J. Sci. 59:313)
Sphacelotheca occidentalis (Seym.) Clinton—Seed smut (Ibid.) See Mycotaxon 6:421 for recent nomenclature of *Sphacelotheca*.

A virginicus L. Broomsedge

FUNGI

Sorosporium ellisii Wint.—Inflorescence smut (Plant Dis. Rptr. 25:196)
Sphacelotheca seymouriana Clinton—Seed smut (OS; Ohio J. Sci. 59:313)
Uromyces andropogonis Tracy—Rust (OS)
Ustilago striiformis (West.) Niessl—Stripe smut (Plant Dis. Rptr. 25:190)

Anthoxanthum odoratum L. Sweet vernalgrass

FUNGI

Erysiphe graminis DC.—Powdery mildew (Ohio J. Sci. 66:570)

Aristida dichotoma Michx. Triple-awned grass

FUNGI

Sorosporium confusum Jacks.—Seed smut (OS; Ohio J. Sci. 59:313)

Arrhenatherum elatius (L.) Mert. & Koch Oatgrass

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (OS) Sprague 1950
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS) CMI 132
Drechslera avenae (Eidam) Scharif. (*Helminthosporium avenae* Eidam; Perf. St. *Pyrenophora avenae* Ito & Kurib.)—Leaf blotch (CWE; Sprague 1950) CMI 389
Septoria avenae Frank [*Stagonospora avenae* (Frank) Bissett] Leaf spot (OS; Daft, M.Sc. Thesis, OSU 1961) Fungi Canadenses No. 239
Ustilago avenae (Pers.) Rostr.—Inflorescence smut (OS)

Avena sativa L. Oats

BACTERIA

Pseudomonas syringae pv. *coronafaciens* (Elliott) Young et al. Bacterial halo blight (CWE) CMI 235
P. syringae pv. *striafaciens* (Elliott) Young, Dye & Wilkie Bacterial stripe blight (CWE) CMI 238; J. Agr. Res. 35:811

FUNGI

Bipolaris victoriae (Meehan & Murphy) Shoem. (*Helminthosporium* v. Meehan & Murphy; Perf. St. *Cochliobolus*)—Victoria blight (OS; Janson, M.Sc. Thesis, OSU 1947) Mycotaxon 17:1-86; CMI 703
Claviceps purpurea (Fr.) Tul.—Ergot (CWE)
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS, CWE) CMI 132
Drechslera avenae (Eidam) Scharif. (*Helminthosporium avenae* Eidam; Perf. St. *Pyrenophora avenae* Ito & Kurib.) —Leaf blotch (OS, CWE) CMI 389
Erysiphe graminis DC.—Powdery mildew (CWE; Ohio J. Sci. 66:570)
Fusarium sp.—Inflorescence blight, seedling blight (Sprague 1950)

F. graminearum Schw.—Scab, seedling blight (CWE; Sprague 1950)
Puccinia coronata Cda.—Crown rust (OS) Amer. Phytopath. Society Monograph No. 5, 1970. Crown rust of oats and grasses.
P. graminis Pers.—Stem rust (OS)
Septoria avenae Frank [*Stagonospora avenae* (Frank) Bissett; Perf. St. *Phaeosphaeria avenaria* (Weber) O. Erikss.]—Black stem, leaf spot (OS) Fungi Canadenses No. 239; CMI 312
Ustilago avenae (Pers.) Rostr.—Loose smut (OS)
U. hordei (Pers.) Lagerh. [*U. kolleri* Wille, *U. levis* (Kell. & Sw.) Magn.]—Covered smut (OS)

VIRUSES, VIROIDS, MYCOPLASMAS

Barley yellow dwarf virus—Barley yellow dwarf, red leaf (REH, CWE, C) Amer. Phytopathological Society Monograph No. 1, 1961. Barley yellow dwarf; CMI/AAB No. 32; OAES Bull. 210 (1909), This bulletin—*The blade blight of oats, a bacterial disease* by T.F. Manns gives a detailed account of what is now considered to be BYD disease.

ABIOTIC

Manganese deficiency—Gray speck (CWE)
 Weather fluctuations (temperature and humidity)—Nonparasitic leaf spot (CWE)

***Bromus ciliatus* L. Fringed brome**

FUNGI

Phyllachora graminis (Pers.) Fckl.—Tar spot (OS) Mycologia 36:18
Septoria bromi Sacc.—Leaf spot (OS) Fungi Canadenses No. 241

***B. inermis* Leyss. Smooth brome**

BACTERIA

Pseudomonas syringae pv. *coronafaciens* (Elliott) Young et al.—Bacterial leaf spot (CWE)

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (OS, CWE) Bove 1970
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (Bell, Ph.D. Dissertat., OSU 1949) CMI 132
Drechslera bromi (Died.) Shoem. [*Helminthosporium bromi* (Died.) Perf. St. *Pyrenophora*]—Leaf spot (OS, CWE) Mycotaxon 17:1-86; Sprague 1950
Pythium graminicola Subr.—Root rot (AFS)

***B. japonicus* Thumb. Japanese brome**

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (Daft, M.Sc. Thesis, OSU 1961)
Ustilago bullata Berk.—Head smut (CWE)

***B. latiglumis* (Shear) Hitchc.**

FUNGI

Phyllachora graminis (Pers.) Fckl.—Tar spot (Daft, M.Sc. Thesis, OSU 1961)

***B. mollis* L. Soft chess**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (Bell, Ph.D. Dissertat., OSU 1949)

***B. purgans* L. Canada brome**

FUNGI

Puccinia recondita Rob. ex Desm.—Leaf rust (CWE)

***B. racemosus* L. (This may be *B. commutatus* Schrad.)**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (Bell, Ph.D. Dissertat., OSU 1949)

***B. secalinus* L. Chess, cheat**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS) CMI 132
Puccinia graminis Pers.—Rust (OS)
Septoria bromi Sacc.—Leaf spot (OS) Fungi Canadenses No. 241

***B. sterilis* L.**

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (Daft, M.Sc. Thesis, OSU 1961)

***B. tectorum* L. Downy brome**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (Bell, Ph.D. Dissertat., OSU 1949) CMI 132

***Calamagrostis canadensis* (Michx.) Nutt. Bluejoint grass**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (Sprague 1950)
Erysiphe graminis DC.—Powdery mildew (Sprague 1950)
Puccinia graminis Pers.—Stem rust (OS)
Ustilago striiformis (Westend.) Niessl—Stripe smut (Fischer 1953)

***Cinna arundinacea* L. Woodreed grass**

FUNGI

Phyllachora graminis (Pers.) Fckl.—Tar spot (Daft, M.Sc. Thesis, OSU 1961) Mycologia 36:18
Puccinia graminis Pers.—Stem rust (OS)

***Dactylis glomerata* L. Orchard grass**

FUNGI

Cercosporidium graminis (Fckl.) Deighton (*Scolecotrichum graminis* Fckl.)—Brown stripe (CWE) Ellis & Ellis 1985; CMI Mycol. Paper 112
Claviceps purpurea (Fr.) Tul.—Ergot (OS)
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS) CMI 132
Dilophospora alopecuri (Fr.) Fr.—Twist (Daft, M.Sc. Thesis, OSU 1961) CMI 490
Erysiphe graminis DC.—Powdery mildew (Ohio J. Sci. 66:570)
Puccinia coronata Cda.—Crown rust (CWE) Monograph No. 5, Amer. Phytopath. Soc. 1970
P. graminis Pers.—Stem rust (OS)
Pythium graminicola Subr.—Root rot (AFS) CMI 38
Rhynchosporium orthosporum Caldwell—Leaf blotch, scald (CWE) Ellis & Ellis 1985; Dickson 1956; CMI 387
Stagonospora arenaria Sacc.—Purple-brown spot (OS) Sprague 1950
Uromyces dactylidis Oth—Rust (Daft, M.Sc. Thesis, OSU 1961)
Ustilago striiformis (Westend.) Niessl—Stripe smut (Ohio J. Sci. 59:313; OS) CMI 717

VIRUSES, VIROIDS, MYCOPLASMAS

Unidentified viruses—Mosaic, etc. (RL)

***Danthonia compressa* Austin Oatgrass**

FUNGI

Atkinsonella hypoxylon (Pk.) Diehl [*Balansia hypoxylon* (Pk.) Atk.]—Black band, sterility (OS) USDA Agric. Monograph 4, 1950

***D. spicata* (L.) Beauv. Poverty grass**

FUNGI

Atkinsonella hypoxylon (Pk.) Diehl (*Balansia h.*) —Black band, choke (OS) Ibid.
Ustilago residua Clint.—Panicle smut (OS)

***Digitaria sanguinalis* (L.) Scop. Hairy crabgrass**

FUNGI

Pyricularia grisea (Cke.) Sacc. (Perf. St. *Magnaporthe grisea*)—Gray leaf spot (OS) Ellis 1971; Can. J. Bot. 56:180
Rhizoctonia solani Kuehn—Brown patch, blight (CWE)
Ustilago syntherismae (Schw.) Pk.—Loose smut (OS)

VIRUSES, VIROIDS, MYCOPLASMAS

Maize white line mosaic virus—Maize white line mosaic (Plant Dis. 66:167) CMI/AAB No. 283

***Echinochloa crusgalli* (L.) Beauv. Barnyard grass**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS)
Rhizoctonia solani Kuehn—Root rot (Roberts, M.Sc. Thesis, OSU 1977)
Ustilago crus-galli (L.) Beauv.—Node smut (Fischer 1953)
U. sphaerogena Burr.—Loose smut (Ibid.)

***Elymus canadensis* L. Canada wild-rye**

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (OS)
Phyllachora graminis (Pers.) Fckl.—Tar spot (Mycologia 36:18)
Puccinia recondita Rob. ex Desm.—Leaf rust (Arthur 1934)

***E. riparius* Wieg.**

FUNGI

Erysiphe graminis DC.—Powdery mildew (Daft, M.Sc. Thesis, OSU 1961)
Phyllachora graminis (Pers.) Fckl.—Tar spot (Ibid.) Mycologia 36:18
Urocystis agropyri (Pruess) Schroet.—Flag smut (CWE; Ohio J. Sci. 59:313)

***E. villosus* Muhl.**

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (OS)
Phyllachora graminis (Pers.) Fckl.—Tar spot (OC) Mycologia 36:18

***E. virginicus* L. Virginia wild-rye**

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (OS)
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS)
Dilophospora alopecuri (Fr.) Fr.—Twist (Daft, M.Sc. Thesis, OSU 1961) CMI 490
Erysiphe graminis DC.—Powdery mildew (Ibid.)
Phyllachora graminis (Pers.) Fckl.—Tar spot (OS) Mycologia 36:18
Puccinia graminis Pers.—Stem rust (OS)
P. recondita Rob. ex Desm.—Leaf rust (Daft, M.Sc. Thesis, OSU 1961)
Urocystis agropyri (Pruess) Schroet.—Flag smut (CWE)

***Euchlaena mexicana* Schrad. Teosinte**

FUNGI

Ustilago maydis (DC.) Cda.—Smut (on experimental plants, OSU greenhouses (CWE))

***Festuca elatior* L. (*F. pratensis* Huds.) Tall and meadow fescues. General references—Compendium of Turfgrass Diseases, 1983. American Phytopathological Society; Couch 1973.**

FUNGI

Acremonium coenophialum Morgan-Jones & Gams—Systemic in tall fescue as an endophyte (LHR; Plant Dis. 71:783) Phytopath. 74:932; Mycologia 77:483; Ann. Rev. Phytopathol. 25:293
Claviceps purpurea (Fr.) Tul.—Ergot (Daft, M.Sc. Thesis, OSU 1961)
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS) CMI 132
Puccinia coronata Cda.—Crown rust on meadow fescue (POL; Daft, M.Sc. Thesis, OSU 1961)
Rhizoctonia solani Kuehn (Perf. St. *Thanatephorus*)—Brown patch, blight (POL)

***F. obtusa* Biehler Nodding fescue, woodland fescue**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (Bell, Ph.D. Dissertat., OSU 1949)
Ustilago striiformis (West.) Niessl—Stripe smut (CWE)

***F. octoflora* Walt. Six-weeks fescue**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (Bell, Ph.D. Dissertat., OSU 1949)

***F. ovina* L. Sheep fescue**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (Ibid.) CMI 132
Laetisaria fuciformis (McAlp.) Bursdall [*Corticium fuciforme* (Berk.) Wakef.]—Red thread (Sprague 1950)
Rhizoctonia solani Kuehn—Root rot, brown patch (Sprague 1950)

***F. rubra* L. Red or fine fescue**

FUNGI

Fusarium nivale (Fr.) Ces. [*Microdochium nivale* (Fr.) Samuels & Hallett]—Pink snow mold (BJ, CWE) Trans. Brit. Mycol. Soc. 83:373; CMI 309
Laetisaria fuciformis (McAlp.) Bursdall [*Corticium fuciforme* (Berk.) Wakef. Imp. St. *Isaria*]—Red thread (CWE, BJ, POL) Can. J. Bot. 60:529
Limonomyces roseipellis Stalpers & Loerakker—Pink patch (BJ, POL) Ibid.
Pythium aphanidermatum (Edson) Fitzpatrick—Cottony blight and root rot (POL; Saladini Ph.D. Dissertat., OSU 1976)
P. graminicola Subr.—Cottony blight and root rot (Saladini, Ph.D. Dissertat., OSU 1976)
Rhizoctonia solani Kuehn (Perf. St. *Thanatephorus*)—Brown patch, blight (POL)
Sclerotinia homoeocarpa F.T. Bennett—Dollar spot (POL) CMI 618 (Not a *Sclerotinia*; taxonomic status uncertain.)

***Glyceria melicaria* (Michx.) Hubb. Mannagrass**

FUNGI

Epichloe typhina (Pers.) Tul. (Imp. St. *Acremonium typhinum* Morgan-Jones & Gams)—Choke (OS) Trans. Brit. Mycol. Soc. 18:30; Mycotaxon 15:311

***G. septentrionalis* Hitchc. Mannagrass**

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (Ellett, Ph.D. Dissertat., OSU 1955)

***G. striata* (Lam.) Hitchc. Mannagrass**

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (CWE)
Epichloe typhina (Pers.) Tul. (Imp. St. *Acremonium*)—Choke (CWE, OS) Trans. Brit. Mycol. Soc. 18:30; Mycotaxon 15:311; CMI 639
Septoria ?nodorum Berk.—Leaf spot (Daft, M.Sc. Thesis, OSU 1961)

***Hordeum jubatum* L. Squirrel-tail barley**

FUNGI

Puccinia graminis Pers.—Stem rust (OS)
P. recondita Rob. ex Desm.—Leaf rust (CWE)

***Hordeum vulgare* L. Barley. General reference—Compendium of Barley Diseases, 1982. American Phytopathological Society**

BACTERIA

Xanthomonas campestris pv. *translucens* (Jones et al.) Dye Bacterial leaf blight, black chaff (CWE)

FUNGI

Ascochyta hordei Hara—Leaf spot (Plant Dis. Rptr. 43:835; CMI Mycol. Paper No. 142)
Bipolaris sorokiniana (Sacc.) Shoem. (*Helminthosporium sativum* Pammel, King & Bakke., Perf. St. *Cochliobolus*)—Root rot and leaf blotch (OS) J. Agr. Res. 24:641; CMI 701
Cercosporidium graminis (Fckl.) Deighton (*Scolecotrichum g.* Fckl.)—Leaf streak or stripe (PDI) CMI Mycol. Paper 112; Ellis & Ellis 1985

Claviceps purpurea (Fr.) Tul.—Ergot (CWE)
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS)
Drechslera graminea (Rabh.) Shoem. (*Helminthosporium gramineum* Rabh. ex Schlecht., Perf. St. *Pyrenophora*)—Stripe (OS) J. Agr. Res. 24:641; Mycotaxon 17:1-86; CMI 388
D. teres (Sacc.) Shoem. (*Helminthosporium t.* Sacc., Perf. St. *Pyrenophora*)—Net blotch (OS) Ibid., CMI 390
Erysiphe graminis DC.—Powdery mildew (OS)
Fusarium graminearum Schw. [Perf. St. *Gibberella zeae* (Schw.) Petch]—Scab or head blight (OS)
Passalora graminis (Fckl.) Hohn. See *Cercosporidium*
Puccinia graminis Pers.—Stem rust (OS)
P. hordei Otth (*P. anomala* Rostr.)—Leaf rust (OS)
Rhynchosporium secalis (Oud.) Davis—Scald (OS; Reed, Ph.D. Dissertat., OSU 1953) CMI 387
Septoria passerinii Sacc.—Speckled leaf blotch (Sprague 1950)
Ustilago avenae (Pers.) Rostr. (*U. nigra* Tapke, *U. medians* Biedenkopf)—Semiloose or black smut (OS)
U. hordei (Pers.) Lagerh.—Covered smut (OS)
U. nuda (Jens.) Rostr.—True loose smut (OS)

VIRUSES, VIROIDS, MYCOPLASMAS

Barley yellow dwarf virus—Barley yellow dwarf (C, CWE, REH, PEL) Monograph No. 1, 1961. American Phytopathological Society; CMI/AAB No. 32)

***Hystrix patula* Moench (*Elymus hystrix* L.) Bottle-brush grass**

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (CWE, OS)
Erysiphe graminis DC.—Powdery mildew (CWE)
Phyllachora graminis (Pers.) Fckl.—Tar spot (OC) Mycologia 36:18
Puccinia recondita Rob. ex Desm.—Leaf rust (CWE)

***Leersia oryzoides* (L.) Sw. Rice cutgrass**

FUNGI

Uromyces halstedii de Toni—Rust (PDI)

***L. virginica* Willd. White grass**

FUNGI

Tilletia corona Scribn.—Bunt (OS)

***Lolium multiflorum* Lam. Italian or annual ryegrass**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (Bell, Ph.D. Dissertat., OSU 1949)
Drechslera siccans (Dresch.) Shoem.—Leaf blight (CWE) Ellis 1971; Sprague 1950; Mycotaxon 17:1-86; CMI 492
Rhizoctonia solani Kuehn—Brown patch, blight (BJ)

***L. perenne* L. Perennial ryegrass. General references Compendium of Turfgrass Diseases, 1983. American Phytopathological Society; Couch 1973**

FUNGI

Claviceps purpurea (Fr.) Tul. - Ergot (Daft, M.Sc. Thesis, OSU 1961)
Drechslera siccans (Dresch.) Shoem.- Leaf blight (POL, PDI) Sprague 1950; Mycotaxon 17:1-86; CMI 492
Laetisaria fuciformis (McAlp.) Bursdall [*Corticium fuciforme* (Berk.) Wakef.]—Red thread (POL, BJ) Can. J. Bot. 60:529
Limonomycetes roseipellis Stalpers & Loerakker—Pink patch (BJ, CWE) Ibid.
Puccinia coronata Cda.—Rust (CWE, OS)
Pythium aphanidermatum (Eds.) Fitz.—Foliar blight (Amer. Phytopath. Soc. Abst. 2:26)
P. graminicola Subr.—Foliar blight (Ibid.)
Sclerotinia homoeocarpa F.T. Bennett—Dollar spot (POL; Plant Dis. Rptr. 59:935) See *Agrostis palustris*

***Melica nitens* Nutt. Melic grass**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (Bell, Ph.D. Dissertat., OSU 1949)

***Muhlenbergia mexicana* (L.) Trin.**

FUNGI

Phyllachora vulgata Th. & Syd.—Tar spot (OC; Daft, M.Sc. Thesis, OSU 1961) Mycologia 36:18
Puccinia schedonnardi Kell. & Sw.—Rust (OS)

***M. schreberi* Gmel. Nimblewill**

FUNGI

Phyllachora vulgata Th. & Syd.—Tar spot (Daft, M.Sc. Thesis, OSU 1961) Mycologia 36:18
Puccinia schedonnardi Kell. & Sw.—Rust (OS)

***Panicum boscii* Poir.**

FUNGI

Septoria tandilensis Speg.—Leaf spot (CWE, OS) Sprague 1950

***P. capillare* L. Witchgrass**

FUNGI

Puccinia emaculata Schw.—Rust (OS)

***P. clandestinum* L. Deer-tongue grass**

FUNGI

Balansia strangulans (Mont.) Diehl—Whiptail (OS) USDA Agr. Monograph 4, 1950
Phyllachora punctum (Schw.) Orton—Tar spot (OS) Mycologia 36:18
Pyricularia grisea (Cke.) Sacc.—Leaf spot (PDI) Ellis 1971; Can. J. Bot. 56:180

VIRUSES, VIROIDS, MYCOPLASMAS

Maize dwarf mosaic virus—Maize dwarf mosaic (Abt, M.Sc. Thesis, OSU 1983)

***P. dichotomiflorum* Michx. Fall panic-grass**

FUNGI

Rhizoctonia solani Kuehn—Root rot (Roberts, M.Sc. Thesis, OSU 1977)
Sorosporium cenchri Henn.—Smut (OS; Ohio J. Sci. 59:313)

VIRUSES, VIROIDS, MYCOPLASMAS

Maize white line mosaic virus—Maize white line mosaic (Plant Dis. 66:167) CMI/AAB No. 283

***P. latifolium* L. Broad-leaved panic-grass**

FUNGI

Phyllachora punctum (Schw.) Orton—Tar spot (Plant Dis. Rptr. 25:191) Mycologia 36:18

***P. milliaceum* L. Broomcorn millet**

FUNGI

Pyricularia grisea (Cke.) Sacc. (Perf. St. *Magnaporthe grisea*)—Leaf spot (OS) Ellis 1971; Can. J. Bot. 56:180

***P. oligosanthos* Schultes**

FUNGI

Phyllachora punctum (Schw.) Orton—Tar spot (CWE)

***P. virgatum* L. Switchgrass**

FUNGI

Puccinia panici Diet.—Rust (Arthur 1934)
Tilletia maclagani (Berk.) Clint.—Seed smut (OS; Ohio J. Sci. 59:313)

***Phalaris arundinacea* L. Reed canarygrass**

FUNGI

Claviceps purpurea (Fr.) Tul.—Ergot (OS)

Drechslera sp.—Leaf spot (Daft, M.Sc. Thesis, OSU 1961)
Septoria sp.—Leaf spot (C)

***Phleum pratense* L. Timothy**

FUNGI

Cercosporidium graminis (Fckl.) Deighton (*Scolecotrichum* g. Fckl.)—Brown stripe (PDI) Ellis & Ellis 1985
Cladosporium phlei (Gregory) de Vries (*Heterosporium p.*)—Purple spot (CWE) Ellis 1976
Claviceps purpurea (Fr.) Tul.—Ergot (OS)
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS)
Heterosporium phlei Greg.—See *Cladosporium*
Puccinia graminis Pers.—Stem rust (OS, CWE)
Pythium graminicola Subr.—Root rot (AFS)
Scolecotrichum graminis Fckl. See *Cercosporidium*
Ustilago striiformis (Westend.) Niessl—Stripe smut (OS; Ohio J. Sci. 59:313)

***Phragmites communis* Trin. Reedgrass**

FUNGI

Puccinia phragmitis (Schum.) Koern.—Leaf rust (OS)

***Poa annua* L. Annual bluegrass. General reference— Compendium of Turfgrass Diseases. 1983. American Phytopathological Society; Couch 1973**

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (WWS)
Fusarium nivale (Fr.) Ces. [*Microdochium nivale* (Fr.) Samuels & Hallett; Perf. St. *Monographella*]—Pink snow mold (POL) Trans. Brit. Mycol. Soc. 83:373; CMI 309
Pythium aphanidermatum (Edson) Fitz.—Foliar blight (POL; Plant Dis. 64:1100)
P. torulosum Coker & Patterson—Foliar blight (WWS)
P. vanterpoolii Kouyeas & Kouyeas—Foliar blight (WWS)
Rhizoctonia cerealis van der Hoeven (Perf. St. *Ceratobasidium cereale* Murray & Burpee)—Yellow patch (POL)
R. solani Kuehn—Brown patch (POL)
R. zeae Voorhees—Brown patch (WWS) Phytopath. 24:1290
Sclerotinia homoeocarpa F.T. Bennett—Dollar spot (POL) See *Agrostis palustris*
Septoria macropoda Pass.—Leaf spot (Sprague 1950; Daft, M.Sc. Thesis, OSU 1969)

***P. compressa* L. Canada bluegrass**

FUNGI

Cercosporidium graminis (Fckl.) Deighton (*Scolecotrichum* g. Fckl.)—Brown stripe (Daft, M.Sc. Thesis, OSU 1961) Ellis & Ellis 1985; CMI Mycol. Paper No. 112
Puccinia brachypodii Otth var. *poae-nemoralis* (Otth) Cumm. & H.C. Greene—Rust (OS)
P. graminis Pers.—Rust (Plant Dis. Rptr. 25:195)

***P. pratensis* L. Kentucky Bluegrass. General reference Compendium of Turfgrass diseases. 1983. American Phytopathological Society; Couch 1973**

FUNGI

Ascochyta sorghi Sacc.—Leaf spot (Sprague 1950) CMI Mycol. Paper No. 142
Bipolaris sorokiniana (Sacc.) Shoemaker (*Helminthosporium sativum* Pam., King, & Bakke; Perf. St. *Cochliobolus*)—Root rot, leaf blight (POL) CMI 701
Claviceps purpurea (Fr.) Tul.—Ergot (OS)
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (POL, CWE)
Curvularia spp.—On senescing plants (C, POL)
Drechslera poae (Baudys) Shoem. (*Helminthosporium vagans* Drechs.)—Leaf blight (CWE, POL) J. Agr. Res. 24:641; Mycotaxon 17:1-86
Entyloma dactylidis (Pass.) Cif.—Blister smut (C)
Erysiphe graminis DC.—Powdery mildew (OS)

Fusarium graminearum Schwabe—Crown and root rot (POL)
F. nivale Ces. ex Sacc. [*Microdochium nivale* (Fr.) Samuels & Hallett; Perf. St. *Monographella*]—Pink snow mold, Fusarium patch (POL) See Trans. Brit. Mycol. Soc. 83:373 for recent taxonomy.
F. tricinatum (Corda) Sacc.—From roots
Laetisaria fuciformis (McAlp.) Bursdall [*Corticium fuciforme* (Berk.) Wakef., Imp. St. *Isaria*]—Red thread (BJ, POL) Can. J. Bot. 60:529
Marasmius graminum (Lib.) Berk.—On senescing leaves (CWE) Plant Pathology 33:589; Mycotaxon 4:1-144
M. oreades (Bolt. ex Fr.) Fr.—Associated with fairy rings (CWE) Miller 1972
Puccinia graminis Pers.—Leaf rust (OS)
P. brachypodii Otth var. *poae-nemoralis* (Otth) Cumm. & Greene—Rust (OS)
Pythium aphanidermatum (Edson) Fitz.—Cottony or foliar blight (Plant Dis. 67:517)
P. graminicola Subr.—Root rot, cottony blight (AFS; Plant Dis. 67:517)
P. torulosum Coker & Patterson—Cottony or foliar blight (Saladini, Ph.D. Dissertat. 1976)
P. vanterpoolii Kouyeas & Kouyeas—Cottony or foliar blight (Ibid.)
Rhizoctonia cerealis van der Hoeven (Perf. St. *Ceratobasidium cereale* Murray & Burpee)—Yellow patch (POL) Trans. Brit. Mycol. Soc. 82:170
R. solani Kuehn [Perf. St. *Thanatephorus cucumeris* (Frank) Donk]—Brown patch (POL, C)
R. zeae Voorhees—Brown patch (WWS, C) Phytopath. 24:1290
Sclerotinia homoeocarpa F.T. Bennett—Dollar spot (C, POL; Plant Dis. Rptr. 59:935) See *Agrostis palustris*
Septoria spp.—Leaf spot (POL)
S. macropoda Pass.—Leaf blotch (Sprague 1950)
Trechispora alnicola (Bourd. & Galz.) Libert—Yellow ring (Can. J. Bot. 65:150; Plant Dis. 72:139)
Typhula incarnata Lasch. ex Fr.—Gray snow mold (POL, CWE)
Urocystis agropyri (Preuss) Schroet.—Flag smut
Ustilago striiformis (Westend.) Niessl—Stripe smut (C, OS)

SLIME MOLDS

Fuligo septica (L.) Weber—Slime mold on plants (CWE) Martin and Alexopoulos 1969
Physarum cinereum (Batsch.) Pers.—Slime mold on leaves (CWE) Ibid.

NEMATODES

Criconebella curvata (Raski) Luc & Raski (*Criconeboides*)—Ring nematode (RMR; Plant Dis. Rptr. 60:405) Revue Nematol. 4:3-21
C. ornata (Raski) Luc & Raski (*Criconeboides*)—Ring nematode (Ibid.) Ibid.
C. parvus (Raski) Luc & Raski (*Criconeboides*)—Ring nematode (Ibid.) Ibid.
C. xenoplax (Raski) Luc & Raski (*Criconeboides*)—Ring nematode (Ibid.) Ibid.

***Secale cereale* L. Rye**

BACTERIA

Xanthomonas campestris pv. *translucens* (Jones et al.) Dye—Bacterial blight (Daft, M.Sc. Thesis, OSU 1961)

FUNGI

Bipolaris sorokiniana (Sacc.) Shoem. (*Helminthosporium sativum* Pamm., King & Bakke; Perf. St. *Cochliobolus*)—Root rot (Sprague 1950) Ellis 1971; Mycotaxon 17:1-86; CMI 701
Claviceps purpurea (Fr.) Tul. (Imp. St. *Sphacelia*)—Ergot (OS) Dickson 1956; Sprague 1950; Bove 1970
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS) Arx 1970; CMI 132; USDA Tech. Bull. 1005
Erysiphe graminis DC.—Powdery mildew (CWE; Ohio J. Sci. 66:570-581)
Fusarium sp.—Scab, head blight (OS)
F. culmorum (W.G. Sm.) Sacc.—Seedling blight, root rot, scab (PDI)
Puccinia graminis Pers.—Stem rust (OS)
P. recondita Rob. ex Desm. (*P. dispersa* Erikss. & Henn.)—Leaf rust (OS) Fungi Canadenses 310
Rhynchosporium secalis (Oud.) J.J. Davis — Scald (CWE, PEL) Sprague 1950
Septoria nodorum (Berk.) Berk. [*Stagonospora nodorum* (Berk.) Castellani & Germano]—Glume blotch (Sprague 1950) CMI 86; Fungi Canadenses No. 240

Urocystis occulta (Wallr.) Rabh.—Stem smut (OS)
Ustilago nuda (Jens.) Rostr. [*U. tritici* (Pers.) Rostrup]—Loose smut (OS)

***Setaria faberii* Herrm. Giant foxtail grass**

FUNGI

Phyllosticta sorghina Sacc.—Leaf spot (CWE) CMI 584
Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis, OSU 1977)

VIRUSES, VIROIDS, MYCOPLASMAS

Maize white line mosaic virus—Maize white line mosaic (Plant Dis. 66:167) CMI/AAB No. 283

***S. glauca* (L.) Beauv. Yellow foxtail grass**

FUNGI

Ustilago neglecta Niessl—Head smut (OS) Ohio J. Sci. 59:313

VIRUSES, VIROIDS, MYCOPLASMAS

Maize dwarf mosaic virus—Maize dwarf mosaic (RL)

***S. italica* (L.) Beauv. Foxtail millet**

FUNGI

Pyricularia grisea (Cke.) Sacc. (Perf. St. *Magnaporthe*)—Gray leaf spot (OS) Ellis 1971; Can. J. Bot. 56:180 (recent taxonomy)
Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis, OSU 1977)
Ustilago crameri Koern.—Head smut (OS; Ohio J. Sci. 59:313)

***S. viridis* (L.) Beauv. Green foxtail**

FUNGI

Pyricularia grisea (Cke.) Sacc. (Perf. St. *Magnaporthe*)—Gray leaf spot (OS; Daft, M.Sc. Thesis, OSU 1961) Ellis 1971; Can. J. Bot. 56:180
Sclerospora graminicola (Sacc.) Schroet.—Downy mildew (OS) CMI 770
Ustilago neglecta Niessl—Head smut (Ohio J. Sci. 59:313)

VIRUSES, VIROIDS, MYCOPLASMAS

Maize dwarf mosaic virus—Maize dwarf mosaic (RL)

***Sorghum bicolor* (L.) Moench (*S. vulgare* Pers.) Sorghum. General references—Compendium of Sorghum Diseases, 1986. American Phytopathological Society; USDA Agr. Handbook 468**

BACTERIA

Pseudomonas andropogonis (E.F. Smith) Stapp—Bacterial leaf stripe (PDI) CMI 372

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS) CMI 132
Exserohilum turcicum (Pass.) Leonard & Suggs [*Helminthosporium turcicum* Pass., Perf. St. *Setosphaeria turcica* (Luttrell) Leonard & Suggs]—Leaf blight (CWE, OS) J. Agr. Res. 24:641; Mycotaxon 17:1-86
Gloeocercospora sorghi Bain & Edgerton—Zonate leaf spot (CWE, OS) Phytopathology 33:220; CMI 300
Puccinia purpurea Cke.—Rust (CWE, OS)
Sphacelotheca reiliana (Kuehn) Clint. [*Sporisorium reilianum* (Kuehn) Langdon]—Head smut (OS) Mycotaxon 6:421; CMI 73
S. sorghi (Link) Clint. [*Sporisorium sorghi* (Ehr.) Link]—Covered kernel smut (OS) Ibid.; CMI 74

NEMATODES

Pratylenchus penetrans (Cobb) Filipjev & Stekhoven—Lesion nematode (RMR)
Xiphinema americanum Cobb—Dagger nematode (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Maize chlorotic dwarf virus (MCDV)—Maize chlorotic dwarf (Plant Dis. Rptr. 59:714) CMI/AAB No. 194

Mycoplasma-like body (MLB)—Yellow sorghum stunt (Plant Dis. Rptr. 59:714)

***S. halepense* (L.) Pers. Johnson grass**

BACTERIA

Pseudomonas andropogonis (E.F. Sm.) Stapp—Leaf blight or stripe (CWE) CMI 372

FUNGI

Ascochyta sorghina Sacc.—Rough leaf spot (OS) Tarr 1962; Sprague 1950; CMI 632; CMI Mycol. Paper No. 142
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS) CMI 132
Exserohilum turcicum (Pass.) Leonard & Suggs [*Helminthosporium turcicum* Pass., Perf. St. *Setosphaeria turcica* (Luttrell) Leonard & Suggs]—Leaf blight (OS) CMI 304
Gloeocercospora sorghi Bain & Edgerton—Zonate leaf spot (CWE, OS) Phytopath. 33:220; CMI 300
Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis, OSU 1977)
Sphacelotheca cruenta (Kuehn) Potter—Loose kernel smut (CWE) CMI 71. See Mycotaxon 6:421
S. sorghi (Link) Clint.—Covered kernel smut (CWE) See Mycotaxon 6:421 for revised nomenclature; CMI 74

VIRUSES, VIROIDS, MYCOPLASMAS

Maize chlorotic dwarf virus (MCDV)—Chlorotic dwarf (OARDC Virology Lab.) CMI/AAB No. 194
Maize dwarf mosaic virus (MDMV)—Maize dwarf mosaic (RL)

***S. vulgare* var. *sudanense* (Piper) Hitchc. Sudan grass**

BACTERIA

Pseudomonas andropogonis (E.F. Smith) Stapp—Bacterial leaf stripe (PDI) CMI 372

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (Bimonth. Bull. Ohio Agr. Exp. Sta. 33:136)
Exserohilum turcicum (Pass.) Leonard & Suggs [*Helminthosporium turcicum* Pass., Perf. St. *Setosphaeria turcica* (Luttrell) Leonard & Suggs] Leaf blight (CWE, OS) CMI 304; J. Agr. Res. 24:641; Mycotaxon 17:1-86

VIRUSES, VIROIDS, MYCOPLASMAS

Maize dwarf mosaic virus—Maize dwarf mosaic (OARDC Virology Lab.)

***Spartina pectinata* Link Slough grass, prairie cordgrass**

FUNGI

Puccinia seymouriana Arth.—Rust (OS)
P. sparganioides Ell. & Barth.—Rust (OS)

***Sphenopholis intermedia* Rydb. [*S. pallens* (Spreng.) Scribn.] Wedgegrass**

FUNGI

Epichloe typhina (Fr.) Tul.—Choke (OS). See *Glyceria*
Puccinia eatoniae Arth.—Rust (OS)

***Tridens flavus* (L.) Hitchc. (*Triodia flava* Smyth) Purpletop grass**

FUNGI

Puccinia windsorise Schw.—Rust (OS)
Rhynchosporina tridentis Sprague & Rogerson—Leaf spot (Mycologia 65:196)

***Triticum aestivum* L. Wheat. General reference—Compendium of Wheat Diseases. 2nd Ed. 1987. American Phytopathological Society.**

BACTERIA

Pseudomonas syringae pv. *atrofaciens* (McCull.) Bergey et al.—Basal glume rot (OS, CWE)

Xanthomonas campestris pv. *translucens* (Jones, Johnson & Reddy)
Dye—Black chaff and leaf streak (CWE)

FUNGI

Bipolaris sorokiniana (Sacc.) Shoem. (*Helminthosporium sativum* Pammel, King & Bakke; Perf. St. *Cochliobolus sativus*)—Root rot and leaf spot (PEL) CMI 701
Cephalosporium gramineum Nisikado & Ikata (*Hymenella*, *Hymenula*)—Stripe (OS) CMI 501; Gams 1971
Claviceps purpurea (Fr.) Tul.—Ergot (OS)
Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OS)
Drechslera tritici-repentis (Died.) Shoem. [*Helminthosporium t.* Died.; Perf. St. *Pyrenophora t.* (Died.) Drechs.]—Tan spot (OS, CWE, PEL) CMI 494
Erysiphe graminis DC.—Powdery mildew (OS)
Fusarium graminearum Schwabe [Perf. St. *Gibberella zeae* (Schw.) Petch]—Scab, seedling blight (OS, PEL)
Gaeumannomyces graminis (Sacc.) Arx & Olivier—Take-all (OS, PEL, CWE) CMI 383; Mycotaxon 11:1-129
Hendersonia crastophila Sacc.—On wheat culms (PEL) CMI 773.
Hendersonia is not a valid genus. Grove 1937; Rossman, Palm & Spielman 1987
Penicillium spp.—Storage molds (PDI)
Polymyxa graminis Led.—In roots, rootlet necrosis. Vector of wheat spindle streak mosaic virus (PEL) Fungi Canadenses No. 199; Can. J. Plant Pathol. 1:85
Puccinia graminis Pers.—Stem rust (OS)
P. recondita Rob. ex Desm. (*P. triticea* Eriks.)—Leaf rust (OS) See Fungi Canadenses No. 309 for recent nomenclature
P. striiformis West. (*P. glumarum* Eriks. & Henn.)—Stripe rust (PEL)
Pythium dissotocum Drechs.—From roots (AFS)
P. graminicola Subr.—Root rot (PEL, AFS) CMI 38
P. irregulare Buis.—Root rot (C, AFS)
P. torulosum Coker & Patterson—Root rot (PEL, AFS)
P. ultimum Trow—Root rot (PEL, AFS)
Rhizoctonia cerealis van der Hoeven (Perf. St. *Ceratobasidium cereale* Murray & Burpee)—Sharp eye spot (OS, PEL, LjH; Phytopath. 72:1574)
R. solani Kuehn—Root rot
Sclerophthora macrospora (Sacc.) Thirum., Shaw, & Naras.—Downy mildew (OS, CWE)
Septoria nodorum—See *Stagonospora*
Septoria tritici Rob. ex Desm. [Perf. St. *Mycosphaerella graminicola* (Fckl.) Schroet.]—Speckled leaf blotch (OS)
Stagonospora nodorum (Berk.) Castellani & Germano [*Septoria nodorum*; Perf. St. *Phaeosphaeria nodorum* (Muller) Hedjaroude]—Glume blotch and leaf blight (OS) Fungi Canadenses No. 240
Tilletia caries (DC.) Tul. (*T. tritici*)—Bunt, stinking smut (Fischer 1953)
T. foetida (Wallr.) Liro (*T. laevis*)—Bunt, stinking smut (OS)
Ustilago nuda (Jens.) Rostr. [*U. tritici* (Pers.) Rostr.]—Loose smut (OS)

NEMATODES

Pratylenchus pratensis (DeMan) Filip.—Lesion nematode (PDI)

VIRUSES, VIROIDS, MYCOPLASMAS

Barley yellow dwarf virus—Barley yellow dwarf (C, PEL, REH) CMI/AAB No. 32; Monograph No. 1. 1961. Amer. Phytopath. Soc.
Maize dwarf mosaic virus—Mosaic (LEW)
Wheat spindle streak mosaic virus (Wheat yellow mosaic virus)—Wheat spindle streak (PEL, REH) CMI/AAB No. 167
Wheat spot mosaic agent—Wheat spot mosaic (Plant Dis. Rptr. 54:156)
Wheat streak mosaic virus—Wheat streak mosaic (LEW, CWE) CMI/AAB No. 48

T. dicoccum Schrank Emmer

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OAES Bull. 214)
Fusarium graminearum Schwabe [Perf. St. *Gibberella zeae* (Schw.) Petch]—Scab (OAES Bull. 214)
Septoria nodorum Berk.—Glume blotch (OS) See *Triticum aestivum*

T. spelta L. Spelt

FUNGI

Colletotrichum graminicola (Ces.) Wils.—Anthracnose (OAES Bull. 214)

Erysiphe graminis DC.—Powdery mildew (CWE, PEL)
Fusarium graminearum Schwabe—Scab (CWE, PEL)
Gaeumannomyces graminis (Sacc.) Arx & Olivier—Take-all (PEL)
Puccinia graminis Pers.—Stem rust (CWE)
P. recondita Rob. ex Desm.—Leaf rust (CWE, OS) Fungi Canadenses No. 309
Ustilago nuda (Jens.) Rostr.—Loose smut (CWE, PEL, OS)

VIRUSES, VIROIDS, MYCOPLASMAS

Barley yellow dwarf virus—Barley yellow dwarf (PEL, REH) CMI/AAB No. 32

Zea mays L. Maize, Indian corn. General references Compendium of Corn Diseases. 2nd ed. 1980 and Maize Diseases: A Reference Source for Seed Technologists. 1988. The APS Press, St. Paul, MN.

BACTERIA

Erwinia chrysanthemi pv. *zeae* Burkholder, McFadden & Dimock
Bacterial stalk rot (top rot) (C, CWE)
E. dissolvens (Rosen) Burkholder—Stalk and root rot (Phytopath. 55:802; C)
E. stewartii (Smith) Dye—Bacterial wilt and leaf blight (OS) Monograph No. 4. 1960. Amer. Phytopath. Soc.
Pseudomonas andropogonis (Smith) Stapp—Bacterial leaf spot; stripe (OS, CWE) Plant Dis. Rptr. 62:213; CMI 372
P. syringae v. Hall—Holcus leaf spot (C)

FUNGI

Ascochyta zeae Stout—Leaf spot (Plant Dis. Rptr. 55:1064)
Aspergillus flavus Lk. ex Fr.—Kernel rot, from seed (Cereal Chem. 25:40-51) CMI 91
A. glaucus group—Kernel rot, from seed (Ibid.)
A. niger v. Tiegh.—Ear mold, from seed (Ibid.)
Bipolaris carbonum Ullstrup [*B. zeicola* (Stout) Shoem.; Perf. St. *Cochliobolus carbonus* Nelson]—Northern leaf spot; ear rot (OS, CWE) Ellis 1971; CMI 349
B. maydis (Nisikado) Shoem. (*Helminthosporium m.* Nisikado; Perf. St. *Cochliobolus heterostrophus* Drechs.)—Southern corn leaf blight, ear rot, seedling blight (OS) CMI 301
Cephalosporium acremonium Cda.—Kernel rot and from stalks (PDI; Sprague 1950; J. Agr. Res. 27:177)
Cercospora zeae-maydis Tehon & McDaniels—Gray leaf spot (OS, REH, CWE; Plant Dis. 71:281) Mycologia 17:240
Colletotrichum graminicola (Ces.) Wils.—Anthracnose leaf blight and stalk rot (OS; Phytopath. 53:364-365) Plant Dis. 67:102
Diplodia maydis (Berk.) Sacc.—See *Stenocarpella*
Epicoccum purpurascens Ehr. & Schlecht. (*E. nigrum* Link)—Seed rot (CWE, C) CMI 680
Exserohilum pedicellatum (A.W. Henry) Leonard & Suggs [*Helminthosporium p.* Henry; Perf. St. *Setosphaeria pedicillata* (Nelson) Leonard & Suggs]—Root rot (Phytopath. 68:1557) CMI 887
E. turcicum (Pass.) Leonard & Suggs [*Helminthosporium t.* Pass; Perf. St. *Setosphaeria turcica* (Luttrell) Leonard & Suggs]—Northern corn leaf blight (OS; Phytopath. 33:407) Phytopath. 48:281; Mycotaxon 17:1-86; CMI 304
Fusarium acuminatum Ell. & Ev.—From roots (Rao, Ph.D. Dissertat., OSU 1976)
F. equiseti (Cda.) Sacc.—From roots (Ibid.)
F. graminearum Schwabe—See *Gibberella zeae*
F. moniliforme Sheldon [Perf. St. *Gibberella fujikuroi* (Sawada) Ito]—Ear and kernel rot, stalk and root rot, seedling blight (OS, C)
F. nivale (Fr.) Ces. (*Microdochium*)—From moldy corn (Appl. Microbiol. 26:1008-1010) See Trans. Brit. Mycol. 83:373 for recent nomenclature.
F. oxysporum (Schlecht.) Snyder & Hansen—From roots (Phytopath. 68:1557)
F. tricinatum (Cda.) Sacc.—From seeds (C)
Gibberella zeae (Schw.) Petch (Imp. St. *Fusarium graminearum* Schwabe)—Stalk and ear rot, seedling blight (OS, PEL) Monograph No. 3. 1966. Amer. Phytopath. Soc.
Kabatella zeae Narita & Y. Hirat.—Eyespot leaf spot (OS)
Macrophoma phaseolina (Tassi) Gold.—Charcoal stalk rot (CWE) CMI 275
Nigrospora oryzae (Berk. & Br.) Petch (Perf. St. *Khushia oryzae*)—Cob and ear rot (CWE, C) CMI 311

N. sphaerica (Sacc.) Mason —From seed (Univ. Ga. Agric. Expt. Sta. Res. Rpt. 277)

Penicillium funiculosum Thom.—Seedling blight (LEW)

P. oxalicum Currie & Thom.—Seedling blight (Sprague 1950)

P. purpurogenum Stoll.—Seedling blight (LEW)

Phyllosticta maydis Arny & Nelson (Perf. St. *Mycosphaerella zeae-maydis* Mukunya & Boothroyd)—Yellow leaf blight (OS; Plant Dis. Rptr. 55:1064)

Physoderma maydis Miyabe—Brown spot (OS, CWE) CMI 753

Puccinia polysora Underw.—Southern leaf rust (OS, CWE, REH, PEL) Cummins 1971

P. sorghi Schw.—Common leaf rust (OS) Ibid.

Pyrenochaete terrestris (Hansen) Gorenz et al.—From roots (Phytopath. 68:1557) CMI 397. Considered a *Phoma* by some

Pythium acanthicum Drechs.—From roots (AFS)

P. aphanidermatum (Edson) Fitz.—Stalk rot (AFS) CMI 36

P. arrhenomanes Drechs.—Seedling blight (PDI) CMI 39

P. dissotocum Drechs.—Rootlet necrosis (Phytopath. 68:1557)

P. graminicola Subr.—Root rot (Ibid.) CMI 38

P. irregulare Buis.—From roots (AFS)

P. iwayamai S. Ito.—From roots (AFS)

P. parocandrum Drechs.—From roots (AFS)

P. periplocum Drechs.—From roots (AFS)

P. torulosum Coker & Patterson—Rootlet necrosis (Phytopath. 68:1557)

P. ultimum Trow—Root rot (PEL, AFS)

P. vexans dBy.—From roots (AFS)

Rhizoctonia solani Kuehn—Seedling root rot (Phytopath. 55:802)

Sclerophthora macrospora (Sacc.) Thirum., Shaw, & Naras.—Crazy top, downy mildew (OS, CWE, PEL)

Sphacelotheca reiliana (Kuehn) Clint.—Head smut (OS, Based on a collection by W.A. Kellerman in August 1897, Shelby County, Ohio. Also collections as a result of experiments by Kellerman on sorghum and corn in the late 1890's in the OSU Botany greenhouses and gardens.) Can. J. Plant Pathol. 2:176-178

Stenocarpella maydis (Berk.) Sutton [*Diplodia maydis* (Berk.) Sacc.]—Stalk and ear rot (OS) Monograph 3. 1966. Amer. Phytopath. Soc.; CMI Mycol. Paper 97

Trichoderma viride Pers. ex Fr.—Ear and kernel rot (CWE)

Ustilago maydis (DC.) Cda.—Common smut (OS) Monograph 2. 1963. Amer. Phytopath. Society

NEMATODES

Helicotylenchus sp.—Spiral nematode (RMR)

Longidorus breviannulatus Norton & Hoffman—Needle nematode (RMR)

Pratylenchus crenatus Loof—Lesion nematode (RMR)

P. hexincisus Taylor and Jenkins—Lesion nematode (RMR)

P. scribneri Steiner (*P. penetrans*)—Lesion nematode (RMR)

Tylenchorhynchus sp.—Stylet (stunt) nematode (RMR)

Xiphinema americanum Cobb—Dagger nematode (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Maize chlorotic dwarf virus (MCDV)—Chlorotic dwarf (Proceed. International Maize Virus Colloquium and Workshop, OARDC, Wooster 1976) CMI/AAB No. 194

Maize dwarf mosaic virus (MDMV)—Maize dwarf mosaic (Plant Dis. Rptr. 47:1107; Phytopath. 55:802) Plant Dis. Rptr. 59:518; Phytopath. 64:1455

Maize necrotic lesion virus—In roots, no visible symptoms except on rub-inoculated leaves (RL; Plant Dis. 72:**))

Maize subtle mosaic virus (MSMV)—Maize subtle mosaic (RL)

Maize white line mosaic virus (MWLMV)—Maize white line mosaic (Plant Dis. Rptr. 66:167-170) CMI/AAB No. 283

Wheat streak mosaic virus (WSMV)—Wheat streak mosaic (Plant Dis. Rptr. 51:207) CMI/AAB No. 48

Wheat spot mosaic agent—Wheat spot mosaic (Plant Dis. Rptr. 54:156)

ABIOTIC, MITES

Saprophytic organisms growing on pollen deposits —Purple sheath spot (CWE)

Sun scald—Gray leaf (CWE)

Eriophyes tulipae (wheat curl mite)—Kernel red streak (OS) Phytopath. 57:986; USDA Agr. Handbook No. 573

Genetic—Blue or purple pigment in embryo visible through the pericarp and sometimes confused with "blue-eye" due to *Penicillium* (CWE) Restricted to a few hybrids.

Z. mays var. praecox Bonsf. Popcorn*

BACTERIA

Erwinia stewartii (Smith) Dye—Bacterial leaf blight (CWE) Monograph No. 4. 1960. Amer. Phytopath. Soc.

FUNGI

Bipolaris maydis (Nisikado) Shoem. (*Helminthosporium m. Nisikado*)—Southern corn leaf blight, ear rot and seedling blight (CWE; Plant Dis. Rptr. 55:382)

Exserohilum turcicum (Pass.) Leonard & Suggs (*Helminthosporium t. Pass.*)—Northern corn leaf blight (CWE)

Gibberella zeae (Schw.) Petch (Imp. St. *Fusarium graminearum* Schwabe)—Ear rot (C, CWE)

Ustilago maydis (DC.) Corda—Smut (C)

Z. mays var. rugosa Bonsf. Sweet corn*

BACTERIA

Erwinia chrysanthemi pv. *zeae* Burk., McFadden & Dimock—Bacterial stalk rot (top rot) (C)

E. stewartii (Smith) Dye—Bacterial wilt and leaf blight (C, CWE, OS) Monograph No. 4. 1960. Amer. Phytopath. Soc.

Pseudomonas andropogonis (Smith) Stapp—Bacterial leaf stripe and spot (CWE) Plant Dis. Rptr. 62:213

FUNGI

Bipolaris maydis (Nisikado) Shoem. (*Helminthosporium m. Nisikado*)—Southern corn leaf blight (OS, C)

Cercospora zeae-maydis Tehon & McDaniels—Gray leaf spot (PEL)

Colletotrichum graminicola (Ces.) Wils.—Anthracnose leaf blight and stalk rot (C, CWE)

Exserohilum turcicum (Pass.) Leonard & Suggs (*Helminthosporium turcicum* Pass.)—Northern corn leaf blight (OS, CWE)

Phyllosticta maydis Arny & Nelson (Perf. St. *Mycosphaerella*)—Yellow leaf blight (C)

Puccinia sorghi Schw.—Common leaf rust (OS, CWE) Cummins 1971

Ustilago maydis (DC.) Cda.—Smut (OS, C) Monograph No. 2. 1963. Amer. Phytopath. Soc.

VIRUSES, VIROIDS, MYCOPLASMAS

Maize chlorotic dwarf virus—Maize chlorotic dwarf (Virology Laboratory, OARDC) CMI/AAB No. 194

Maize dwarf mosaic virus—Maize dwarf mosaic (Plant Dis. Rptr. 47:1107)

Maize white line mosaic virus—Maize white line mosaic (Plant Dis. 66:167) CMI/AAB No. 283

Zizania aquatica L. Wild rice

FUNGI

Entyloma lineatum (Cke.) J.J. Davis—Leaf smut (PDI)

HAMAMELIDACEAE

Hamamelis vernalis Sorg. Vernal witch-hazel

FUNGI

Podosphaera biuncinata Cke. & Pk.—Powdery mildew (OS)

ABIOTIC

Iron deficiency—Chlorosis (E.M. Smith, OARDC Res. Cir. 263)

H. virginiana L. Witch-hazel

FUNGI

Phyllosticta hamamelidis (Cke.) G. Martin—Leaf spot (OS)

*Note—Many or most of the pathogens listed on *Zea mays* (Indian corn) likely occur on sweet corn and popcorn.

Podosphaera biuncinata Cke. & Pk.—Powdery mildew (Ohio J. Sci. 66:570)

Liquidambar styraciflua L. Sweet gum

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. de Not. (Imp. St. *Dothiorella*)—Canker; dieback (C, CWE) Plant Dis. Rptr. 47:229; CMI 395

Ganoderma lucidum (Curt. ex Fr.) Karst.—Root and trunk decay (OS) CMI 445

Polyporus dryadeus Pers. ex Fr.—Butt rot (CWE) Overholts 1953

Septoria liquidambaris Cke. & Ell.—Leaf spot (CWE)

Tubakia dryina (Sacc.) Hoehn. [*Actinopelte d.* (Sacc.) Hoehn.]—Leaf spot (CWE) Trans. Brit. Mycol. Soc. 60:164; Mycotaxon 29:101

PARASITIC SEED PLANTS

Phoradendron flavescens (Pursh) Nutt. [*P. serotinum* (Raf.) Johnst.]—Mistletoe (PDI) Fernald 1950

ABIOTIC

Iron deficiency—Chlorosis (E.M. Smith, OARDC Res. Cir. 263)

HIPPOCASTANACEAE

Aesculus glabra Willd. Ohio buckeye

FUNGI

Guignardia aesculi (Pk.) Stewart [*Botryosphaeria a.* (Pk.) Barr; Imp. St. *Phyllosticta sphaeropoidea* Ell. & Ev.]—Leaf blotch (OS) Fungi Canadenses 280

Septoria sp.—Leaf spot (OS)

Uncinula flexuosa Pk.—Powdery mildew (OS)

ABIOTIC

Water stress—Leaf scorch (CWE)

A. hippocastanum L. Horsechestnut

FUNGI

Guignardia aesculi (Pk.) Stewart [*Botryosphaeria a.* (Pk.) Barr; Imp. St. *Phyllosticta sphaeropoidea* Ell. & Ev.]—Leaf blotch (OS) Fungi Canadenses 280

Nectria cinnabarina (Tode) Fr.—On stems (CWE) CMI Mycol. Paper No. 73; CMI 531

Uncinula flexuosa Pk.—Powdery mildew (CWE)

ABIOTIC

Water stress—Leaf scorch (CWE)

A. octandra Marsh. Yellow buckeye

FUNGI

Guignardia aesculi (Pk.) Stewart [*Botryosphaeria a.* (Pk.) Barr]—Leaf blotch (CWE) See *A. glabra*

Uncinula flexuosa Pk.—Powdery mildew (CWE)

HYDROPHYLLACEAE

Hydrophyllum appendiculatum Michx. Appendaged waterleaf

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

H. canadense L. Waterleaf

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

Septoria hydrophylli Ell. & Dearn.—Leaf spot (CWE, OS)

Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (PDI)

H. macrophyllum Nutt. Large-leaf waterleaf

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

Peronospora hydrophylli Waite—Downy mildew (OS; Ohio J. Sci. 70:218)

H. virginianum L. Virginia waterleaf

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

Peronospora hydrophylli Waite—Downy mildew (OS)

HYPERICACEAE

Hypericum sp. St. Johnswort

NEMATODES

Meloidogyne sp.—Root knot (JDW; Plant Dis. Rptr. 45:380)

Hypericum mutilum L.

FUNGI

Uromyces triquetrus Cke. (*U. hyperici* Curt.)—Rust (OS)

IRIDACEAE

Gladiolus x hortulans Bailey Gladiolus. General reference Strider (ed.) Diseases of Floral Crops. Vol. 2. 1985. Praeger Publ.

BACTERIA

Pseudomonas gladioli Sev. [*P. marginata* (McCull.) Stapp]—Corm scab (OAES Bull. 470; CWE) J. Agr. Res. 29:159

Xanthomonas campestris pv. *gummosus* (McCull.) Dye—Bacterial blight (OS) J. Agr. Res. 27:225

FUNGI

Botrytis cinerea Pers. (Perf. St. *Botryotinia*)—Gray mold, flower blight (CWE)

Fusarium oxysporum Schlecht.—Corm rot, yellows (CWE)

Penicillium gladioli McCull. & Thom—Corm rot (CWE) J. Agr. Res. 36:218

Septoria gladioli Pass.—Leaf spot and corm rot (OAES Bull. 511) Cornell Agr. Exp. Sta. Bull. 380; Grove 1935

Stromatinia gladioli (Drayton) Whet.—Dry rot of corms (Bi-month. Bull. Ohio Agr. Exp. Sta. 16:71) Phytopath. 18:519; Seaver 1951

VIRUSES, VIROIDS, MYCOPLASMAS

Virus (?)—Mosaic (CWE) Phytopath. 43:11

Iris dichotoma Pall.

FUNGI

Puccinia iridis Rab.—Rust (CWE, OS) CMI 285

I. fulva Ker-Gawl Red-brown iris

FUNGI

Puccinia iridis Rab.—Rust (PDI) Ibid.

I. x germanica L. Common iris

BACTERIA

Erwinia carotovora (Jones) Holland—Bacterial soft rot (CWE)

FUNGI

Botryotinia convoluta (Drayton) Whet. (Imp. State *Botrytis convoluta*)—Crown and rhizome rot (C, CWE) Mycologia 24:475; Strider 1985
Cladosporium iridis (Fautr. & Roum.) DeVries [*Heterosporium gracile* (Wallr.) Sacc., Perf. St. *Mycosphaerella macrospora* (Kleb.) Jorstad; (*Didymella macrospora* Kleb.)]—Leaf spot (OS) Ellis 1971; CMI 435
Sclerotium rolfsii Sacc. [Perf. St. *Athelia rolfsii* (Curzi) Tu & Kimbrough]—Rhizome and stem rot (CWE) N. Car. Agr. Exp. Sta. Tech. Bull. 174; CMI 410

***I. laevigata* Fisch. Japanese iris**

FUNGI

Pythium sp.—Root rot (C)

NEMATODES

Meloidogyne hapla Chitwood—Root knot (RMR)

***I. sibirica* L. Siberian iris**

FUNGI

Puccinia iridis Rab.—Rust (CWE, OS) CMI 285

***I. spuria* L. Butterfly iris**

FUNGI

Sclerotium rolfsii Sacc.—Crown, stem rot (WBC)

***I. versicolor* L. Large blueflag**

FUNGI

Phyllosticta iridis Ell. & G. Martin—Leaf spot (OS)

***I. virginica* L.**

FUNGI

Puccinia sessilis Schneid.—Rust (CWE, OS)

JUGLANDACEAE

***Carya* sp. Hickory**

FUNGI

Aleurodiscus candidus (Schw.) Burt—Bark patch (PDI)

Corticium vellereum Ell. & Cragin—Decay (FB)

Hypoxyton sp.—Decay (FB)

Marssonina juglandis (Lib.) Mgn. [Perf. St. *Gnomonia leptostyla* (Fr.) Ces. & deNot.]—Anthracnose leaf blight (Bi-monthly Bull. OAES 1:335) Barr 1978

Phyllosticta caryae Pk.—Leaf spot (OS) According to Arx, 1970, this is a synonym of *Cylindrosporella caryae* (Pk.) Petr.

Polyporus adustus Willd. ex Fr.—Wood decay (FB) Overholts 1953

P. delectans (Pk.) Murr. (*Spongipellis*)—Wood decay (FB)

Poria andersonii (Ell. & Ev.) Neuman (*Inonotus andersonii*)—White rot, wood decay (FB) Lowe 1966

P. cocos (Schw.) Wolf—Root and butt rot (FB) Ibid.

Stereum ostrea (Blume) Fr. (*S. fasciatum* Schw.)—Wood rot (FB) USDA Agr. Monograph 24

***C. cordiformis* (Wang.) K. Koch Bitternut hickory**

FUNGI

Cristulariella moricola (Hino) Redhead —Zonate leaf spot (CWE) See *Juglans nigra*

***C. illinoensis* (Wang.) C. Koch Pecan**

FUNGI

Cladosporium caryigenum (Ell. & Long.) Gottwald (*Fusicladium effusum* Wint.)—Scab (C) Mycologia 74:382

***C. laciniosa* (Michx.) Loud. Shellbark hickory**

FUNGI

Poria (*Inonotus*) *andersonii* (Ell. & Ev.) Neuman—White heart rot (FB) Lowe 1966

***C. ovalis* (Wang.) Sarg. Sweet pignut**

FUNGI

Gloeosporium caryae Ell. & Dearn. (Perf. St. *Gnomonia caryae* Wolf)—Anthracnose leaf blight (OS) Barr 1978; Arx, 1970, reports this as *Cylindrosporella caryae* (Pk.) Petrak

***C. ovata* (Mill.) Koch Shagbark hickory**

FUNGI

Gloeosporium caryae Ell. & Dearn. (Perf. St. *Gnomonia caryae* Wolf)—

Anthracnose leaf blight (OS) Ibid.

Microstroma juglandis (Bereng.) Sacc.—Downy leaf blight (OS) See *Juglans cinerea*

Poria andersonii (Ell. & Ev.) Neuman—White heart rot (FB) Lowe 1966

Phyllosticta caryae Pk.—Leaf spot (OS) See *Carya* sp.

***C. tomentosa* Nutt. Mockernut hickory**

FUNGI

Phyllosticta caryae Pk.—Leaf spot. See *Carya* sp.

Septoria caryae Nutt.—Leaf spot (Plant Dis. Rptr. 27:26)

***Juglans cinerea* L. Butternut**

FUNGI

Marssonina juglandis (Lib.) Mgn. [*Marssoniella*; Perf. St. *Gnomonia leptostyla* (Fr.) Ces. & deNot.]—Anthracnose leaf spot (OS) Barr 1978; Md. Agr. Exp. Sta. Bull. A-113, 1960; Arx 1987

Microstroma juglandis (Bereng.) Sacc.—Downy leaf spot (OS) J. Elisha Mitchell Sci. Soc. 43:97

INSECTS, MITES

Eriophyes cinereae Kiefer—Erineum patches caused by a mite; may be mistaken for disease (CWE) USDA Agr. Handbook 573

***J. nigra* L. Black walnut**

FUNGI

Cristulariella moricola (Hino) Redhead (Perf. St. *Grovesinia pyramidalis* Cline, Crane & Cline)—Zonate leaf spot (CWE) Mycologia 71:722 and 75:988

Laetiporus sulfureus (Bull. ex Fr.) Boud. & Sing. (*Polyporus sulfureus*)—Heart rot (Bimonth. Bull. OAES 1:339)

Marssonina juglandis (Lib.) Mgn.—Anthracnose leaf spot (OS) See *J. cinerea*

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

Nectria galligena Bres. [Imp. St. *Cylindrocarpon mali* (Allesch.) Wr.]—Target canker (CWE) Lloydia 6:77; CMI Mycol. Paper No. 73

Phyllactinia guttata (Fr.) Lev.—Powdery mildew (OS)

Phytophthora sp.—Root and collar rot (C)

VIRUSES, VIROIDS, MYCOPLASMAS

Mycoplasma-like organism—Walnut bunch (CES) J. Arboriculture, Jan. 1976

***J. regia* L. English walnut**

BACTERIA

Xanthomonas campestris pv. *juglandis* (Pierce) Dye—Bacterial leaf blight (C)

FUNGI

Marssonina juglandis (Lib.) Mgn.—Anthracnose (C) See *J. cinerea*
Microstroma juglandis (Bereng.) Sacc.—Downy leaf blight (OS) See *J. cinerea*

Phomopsis sp.—From twigs (C)

JUNCACEAE

***Juncus effusus* L. Bog rush**

FUNGI

Endodothella junci (Fr.) Th. & Syd.—Stem spot (PDI)

Uromyces junci-effusi Syd.—Rust (OS)

***J. tenuis* Willd. Slender rush**

FUNGI

Uromyces silphii Arth.—Rust (OS)

Cintractia junci (Schw.) Trel.—Inflorescence smut (OS)

***Luzula campestris* (L.) DC. (Correct name may be *L. multiflora* or *L. echinata*) Woodrush**

FUNGI

Puccinia obscura Schroet.—Rust (OS)

LABIATAE

Agastache nepetoides (L.) Ktze. Giant-hyssop

FUNGI

Puccinia hyssopi Schw.—Rust (OS)

Septoria lophanthi Wint.—Leaf spot (OS)

Ajuga reptans L. Ajuga, bugleweed

FUNGI

Phyllosticta sp.—Leaf spot (CWE)

Ramularia ajugae (Niessl) Sacc.—Leaf spot (CWE) Ellis & Ellis 1985

Sclerotium rolfsii Sacc. (Perf. St. *Athelia rolfsii*)—Southern blight (OS, C) N. Car. Agr. Exp. Sta. Tech. Bull. 174; CMI 410

NEMATODES

Meloidogyne sp.—Root knot (JDW; Walker, Ph.D. Dissertat. OSU 1960)

Blephilia ciliata (L.) Benth.

FUNGI

Puccinia menthae Pers.—Rust (OS) CMI 7

B. hirsuta (Pursh) Benth. Wood mint

FUNGI

Puccinia menthae Pers.—Rust (OS) Ibid.

Coleus x hybridus Voss Coleus

FUNGI

Pythium sp.—Seedling blight (Stephens, M.Sc. Thesis, OSU 1976)

Cunila origanoides (L.) Britt. Dittany

FUNGI

Puccinia menthae Pers.—Rust (OS) CMI 7

Dracocephalum ruyschiana L.

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

Galeopsis tetrahit L. Hemp nettle

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (PDI)

Glechoma hederacea L. Ground ivy

FUNGI

Rhizoctonia solani Kuehn—Leaf blight (CWE)

Lamium amplexicaule L. Common henbit

FUNGI

Peronospora lamii A. Braun—Downy mildew (Ohio J. Sci. 70:218; CMI 688)

Septoria lamii Pass.—Leaf spot (OS, CWE) Grove 1935

L. purpureum L. Red henbit

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

Lavandula officinalis L. Lavander

FUNGI

Septoria lavandulae Desm.—Leaf spot (PDI) Grove 1935

Leonurus cardiaca L. Motherwort

FUNGI

Phyllosticta decidua Ell. & Kell.—Leaf spot (N. Amer. Flora 6:60) See entry under *Nepeta*.

Lycopus americanus Muhl. Water-horehound

FUNGI

Puccinia angustata Pk.—Rust (CWE, OS)

Mentha arvensis L. Field mint

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

Puccinia menthae Pers.—Rust (OS) CMI 7

M. spicata L. Spearmint

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

Phyllosticta decidua Ell. & Kell.—Leaf spot (OS) See entry under *Nepeta*.

Puccinia menthae Pers.—Rust (OS)

Ramularia menthicola Sacc.—Leaf spot (CWE) Ellis & Ellis 1985

Monarda clinopodia L. Horse-mint, bergamot

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)

Puccinia menthae Pers.—Rust (OS)

M. didyma L. Bee-balm, Oswego-tea

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE; Ohio J. Sci. 66:570)

Puccinia menthae Pers.—Rust (CWE) CMI 7

M. fistulosa L.

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (WBC)

Puccinia menthae Pers.—Rust (OS)

Nepeta cataria L. Catnip

FUNGI

Didymella catariae (Cke. & Ell.) Sacc.—On stems (PDI)

Phyllosticta decidua Ell. & Kell.—Leaf spot (N. A. Flora 6:60) *Phoma exigua* Desm. reported to be the valid name (Persoonia 5:15-28)

Ocimum sp. Basil

FUNGI

Verticillium albo-atrum Reinke & Berth.—Wilt (CWE)

Origanum sp. Marjoram

FUNGI

Puccinia menthae Pers.—Rust (CWE, ODA) CMI 7

Pholomis ?samia L. Per.

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

Physostegia virginiana (L.) Benth. False dragonhead

FUNGI

Puccinia physostegiae P. & C.—Rust (ODA)

Sclerotinia sclerotiorum (Lib.) dBy.—Stem and crown rot (C)

Sclerotium rolfsii Sacc. (Perf. St. *Athelia*)—Crown rot (CWE) N. Car. Agr. Exp. Sta. Tech. Bull. 174; CMI 410

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

Prunella grandiflora (L.) Scholl

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Ibid.)

P. vulgaris L. Self-heal

FUNGI

Ramularia brunellae Ell. & Ev.—Leaf spot (CWE, PDI)
Septoria brunellae Ell. & Holw.—Leaf spot (OS) J. Mycol. 1:6
Sphaerotheca macularis (Wallr.) Lind.—Powdery mildew (OC)

Pycnanthemum flexuosum (Walt.) BSP.

FUNGI

Puccinia menthae Pers.—Rust (OS)

P. incanum (L.) Michx.

FUNGI

Puccinia menthae Pers.—Rust (OS)

P. pilosum Nutt. Mountain mint

FUNGI

Puccinia menthae Pers.—Rust (OS)

P. virginianum (L.) Durand & Jackson

FUNGI

Puccinia menthae—Rust (OS)

Salvia farinacea Benth. Mealy-cup sage

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (Plant Dis. Rptr. 47:289)
Thielaviopsis basicola (Berk. & Br.) Ferr.—Root rot (C, NJT) CMI 170

S. splendens F. Sellow ex Roem. & Schult. Scarlet sage

FUNGI

Pythium debaryanum Hesse—Damping-off (PDI) Not a valid species.
See Plaats-Niterink 1981
Rhizoctonia solani Kuehn—Seedling blight (C, PDI)

S. x superba Stapf.

FUNGI

Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot (CWE) Mycotaxon 9:365

Satureja sp. Calamint, savory

FUNGI

Puccinia menthae Pers.—Rust (OS)

Scutellaria epilobifolia A. Hamilton Common skullcap

FUNGI

Phyllosticta decidua Ell. & Kell.—Leaf spot (N. Amer. Flora 6:60) See entry under *Nepeta*.

S. lateriflora L. Mad-dog skullcap

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

S. ovata Hill

FUNGI

Septoria scutellariae Thuem.—Leaf spot (OS)

Stachys byzantina C. Koch. Lamb's ears

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

S. palustris L. Woundwort

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (PDI)
Phyllosticta palustris Ell. & Dearn.—Leaf spot (Ohio Nat. 13:34)

S. riddellii House Hedge-nettle

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

S. tenuifolia Willd. Hedge-nettle

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (NFC, OC)
Septoria stachydis Rob. ex Desm.—Leaf spot (OS) Ellis & Ellis 1985

Teucrium canadense L. Germander

FUNGI

Cercospora teucrii Ell. & Kell.—Leaf spot (OS)

NEMATODES

Meloidogyne sp.—Root knot (C)

Thymus sp. Thyme

FUNGI

Rhizoctonia solani Kuehn—Root rot (C)
Sclerotium rolfsii Sacc. (Perf. St. *Athelia rolfsii*)—Southern blight, crown rot (C) N. Car. Agr. Exp. Sta. Tech. Bull. 174; CMI 410

LAURACEAE

Lindera benzoin (L.) Blume Spicebush

FUNGI

Cytospora sp.—On stems (C)
Monostichella falcata (Dearn. & House) Arx (*Gloeosporium* f. Dearn. & House)—Leaf spot (CWE) Arx 1970
Stereum albobadium (Schw.) Fr.—Wood decay (WBC)

Sassafras albidum (Nutt.) Nees Sassafras

FUNGI

Discula sassafras (Cke.) Arx [*Gloeosporium* s. (Cke.) Ell. & Ev.; *Phyllosticta* s. Cke.]—Leaf spot (OS) Arx 1970
Fomes ignarius (L. ex Fr.) Kickx (*Phellinus*)—White heart rot (PDI) CMI 194
Nectria galligena Bres. [Imp. St. *Cylindrocarpon mali* (Allesch.) Wr.]—Target canker (CWE) CMI Mycol. Paper No. 73
Phyllosticta sassafras Cke.—Leaf spot (OS) Listed as a synonym of *Discula sassafras* by Arx 1970
Pleuroceras sassafras (Ell. & Ev.) Barr (*Gnomoniella* s.)—On leaves (Barr 1978)

LEGUMINOSAE

Amphicarpa bracteata (L.) Fern. Hog peanut

FUNGI

Cercospora monoica Ell. & Holw.—Leaf spot (Ohio Nat. 13:31)
Erysiphe polygoni DC.—Powdery mildew (Ohio J. Sci. 66:570)
Synchytrium aecidioides (Pk.) Lag.—Leaf galls (OS) Karling 1964

Apios americana Medic. Groundnut

FUNGI

Cercospora tuberosa Ell. & Kell.—Leaf spot (OS)
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio Nat. 13:25)

Baptisia tinctoria (L.) R. Br. False indigo

FUNGI

Erysiphe polygoni DC.—Powdery mildew (Ohio Nat. 13:64)

Caragana sp. Pea-tree

FUNGI

Ascochyta sp.—Leaf spot (PDI)

Cassia fasciculata Michx. Partridge pea

FUNGI

Ravenelia cassiaeicola Atk.—Leaf rust (Arthur 1934) Cummins 1978

Cercis canadensis L. Redbud

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (Imp. St. *Dothiorella*)—Canker and dieback (CWE, C) Plant Dis. Rptr. 25:29. See Arx 1987

Cercospora cercidicola Ell. [Perf. St. *Mycosphaerella c.* (Ell. & Kell.) Wolf]—Leaf spot (OS, CWE) Mycologia 32:129

Ganoderma lucidum (Leyss. ex Fr.) Karst.—White spongy heart rot (CWE) Overholts 1953; CMI 445

Phyllosticta cercidicola Ell. & Ev.—Leaf spot (CINC)

Verticillium albo-atrum Reinke & Berth.—Vascular wilt (C) CMI 255, 256

Cladrastis lutea (Michx. f.) K. Koch Yellowwood

FUNGI

Gloeosporium sp.—Vein lesions (CWE)

Verticillium albo-atrum Reinke & Berth.—Wilt (ODA)

Coronilla varia L. Crown vetch

FUNGI

Phytophthora megasperma Drechs.—Root rot (AFS) CMI 115

Sclerotinia trifoliorum Erikks.—Crown rot (AFS) Bot. Rev. 46:101; Phytopath. 69:881; Mycotaxon 9:365

Crotalaria (?ochroleuca) G. Don

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE) Demonstration plots, OSU

Desmodium canadense (L.) DC. Tick-trefoil, beggar's ticks

FUNGI

Microsphaera diffusa Clint. & Pk.—Powdery mildew (Ohio J. Sci. 66:570)

Uromyces hedysari-paniculati (Schw.) Farl.—Rust (OS) Cummins 1978

D. canescens (L.) DC. Tick-trefoil

FUNGI

Cercospora desmodii Ell. & Kell.—Leaf spot (OS)

Erysiphe polygoni DC.—Powdery mildew (Ohio Nat. 10:166)

Microsphaera diffusa Clint. & Pk.—Powdery mildew (OS)

Uromyces hedysari-paniculati (Schw.) Farl.—Rust (OS) Cummins 1978

D. cuspidatum (Muhl.) Loud.

FUNGI

Cercospora sp.—Leaf spot (OS)

D. dillenii Darl.

FUNGI

Microsphaera diffusa Clint. & Pk.—Powdery mildew (OS; Ohio J. Sci. 66:570)

D. illinoense Gray

FUNGI

Uromyces hedysari-paniculati (Schw.) Farl.—Rust (OS) Cummins 1978

D. laevigatum (Nutt.) DC.

FUNGI

Uromyces hedysari-paniculati (Schw.) Farl.—Rust (OS) Ibid.

D. nudiflorum (L.) DC.

FUNGI

Microsphaera diffusa Clint. & Pk.—Powdery mildew (OS; Ohio J. Sci. 66:57)

D. paniculatum (L.) DC. Common tick-trefoil

FUNGI

Uromyces hedysari-paniculati (Schw.) Farl.—Rust (OS) Cummins 1978

D. pauciflorum (Nutt.) DC.

FUNGI

Uromyces hedysari-paniculati (Schw.) Farl.—Rust (OS) Ibid.

D. viridiflorum (L.) DC.

FUNGI

Microsphaera diffusa Clint. & Pk.—Powdery mildew (OS)

Uromyces hedysari-paniculati (Schw.) Farl.—Rust (OS) Cummins 1978

Gleditsia tricanthos L. Honeylocust

FUNGI

Cucurbitaria elongata (Fr.) Grev.—On branches, ? canker (PDI)

Linospora gleditsiae Miller & Wolf—Tar spot (OS) Mycologia 28:171

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

VIRUSES, VIROIDS, MYCOPLASMAS

Mycoplasmal-like organism—Witches'-broom (PDI)

Glycine max (L.) Merr. Soybean. General reference— Compendium of Soybean Diseases, 2nd Ed. 1982. American Phytopathological Society.

BACTERIA

Pseudomonas syringae pv. *glycinea* (Coerper) Young et al—Bacterial blight (C; Daft, Ph.D. Dissertat. OSU 1970; Phytopath. 62:57)

P. syringae pv. *tabaci* (Wolfe & Foster) Young et al—Bacterial Wildfire (C; CWE)

Xanthomonas campestris pv. *glycines* (Nakano) Dye—Bacterial pustule (C; CWE)

FUNGI

Alternaria sp.—Leaf spot (CWE)

Alternaria alternata (Fr.) Keissler—From seeds (Hobbs, Ph.D. Dissertat. OSU 1984) Ellis 1971

Aspergillus glaucus Lind—From seed (Gupta, Ph.D. Dissertat. OSU 1984)

A. niger van Tieghem—From seeds (Hobbs, Ph.D. Dissertat. OSU 1984) CMI 94

Cercospora kikuchii Matsumoto & Tomoyasu—Purple seed stain (C, CWE, OS)

C. sojina Hara—Frogeye leaf spot (CWE; Porter, M.Sc. Thesis OSU 1939)

Chaetomium globosum Kunze—From seeds (Hobbs, Ph.D. Dissertat. OSU 1984)

Cladosporium herbarum (Pers.) Lk.—From seeds (Ibid.)

Colletotrichum dematium f. *truncata* (Schw.) Arx—Anthracnose; pod blight and stem canker (AFS, CWE)

Corynespora cassiicola (Berk. & Curt.) Wei—From roots and stems (C) Plant Dis. Rptr. 41:696; CMI 303

Diaporthe phaseolorum (Cke. & Ell.) Sacc. var. *caulivora* Athow & Caldwell—Stem canker, top dieback, seed decay (Phytopath. 68:836-840; Plant Dis. 65:618-620)

D. phaseolorum (Cke. & Ell.) Sacc. var. *sojae* (Lehm.) Wehm. (Imp. St. *Phomopsis*)—Seed decay, pod and stem blight (Phytopath. 68:836-840; Mycologia 77:535)

Epicoccum nigrum Lk.—From seed (Hobbs, Ph.D. Dissertat. OSU 1984) CMI 680

Fusarium sp.—Root rot (AFS)

F. semitectum Berk. & Rav.—Seed decay (Gupta, Ph.D. Dissertat. OSU 1984)

Macrophomina phaseolina (Tassi) G. Goid.—Charcoal rot (CWE, AFS) and from seed (AFS) CMI 275

Microsphaera diffusa Cke. & Pk.—Powdery mildew (CWE, C) Plant Dis. 68:953
Penicillium sp.—Seedling disease (CWE) Phytopath. 35:144-145
P. verrucosum Dierckx.—From seed (Hobbs, Ph.D. Dissertat. OSU 1984)
Peronospora manshurica (Naum.) Syd. ex Gaum.—Downy mildew (OS)
Phialophora gregata (Allington & Chamberlain) W. Gams (*Cephalosporium* g. Allington & Chamberlain)—Brown stem rot (OS)
Phomopsis longicolla Hobbs—Seed mold and decay (Mycologia 77:535)
Phyllosticta sojicola Massal.—Leaf spot (OS)
Phytophthora megasperma Drechs. var. *sojae* Hildebrand—Root and stem rot, seedling blight (C, AFS) Phytopath. 49:376-379
Pythium dissotocum Drechs.—From roots (AFS)
P. irregulare Buis.—From roots (AFS)
P. oligandrum Drechs.—From roots (AFS) CMI 119
P. ultimum Trow—Root rot and seedling blight (AFS; Phytopath. 71:134)
P. vexans dBy.—From roots (AFS)
Rhizoctonia solani Kuehn—Root and stem rot (C, AFS) and from seeds (AFS)
Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot (OS) and from seeds (AFS) CMI 513
Septoria glycines Hemmi—Brown spot (OS)
Thielaviopsis basicola (Berk. & Br.) Ferr.—Root rot (AFS) CMI 170
Trichoderma harzianum Rafai—From seeds (Hobbs, Ph.D. Dissertat. OSU 1984)

NEMATODES

Heterodera glycines Ichinole—Cyst nematode (RMR; Plant Dis. 72:363)
Meloidogyne hapla Chitwood—Root knot (RMR)
Pratylenchus penetrans (Cobb) Filipjev & Stekhoven—Lesion nematode (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Alfalfa mosaic virus—Mild symptoms (AFS) CMI/AAB No. 229
 Bean yellow mosaic virus—Bean yellow mosaic (DTG, AFS) CMI/AAB No. 40
 Soybean mosaic virus—Mosaic (Ohio Report. Jan.-Feb. 1970, AFS) CMI/AAB No. 93
 Soybean mosaic virus & tobacco ringspot virus—Bud blight (Ibid.)
 Tobacco ringspot virus—Bud blight (Ibid.; Plant Dis. Rptr. 7:86) CMI/AAB No. 17

ABIOTIC

Lightning—plants dying in circular spots (CWE, AFS)
 Manganese deficiency—Interveneal chlorosis (J. Johnson, in OCES Ext. Bull. 741. 1987)
 Potassium deficiency—Marginal chlorosis of leaves (Ibid.)
 Sunburn—Small brick-red interveneal spots on both leaf surfaces (AFS)

Gymnocladus dioica (L.) Koch Kentucky coffee tree

FUNGI

Cercospora gymnocladi Ell. & Kell.—Leaf spot (OS) Chupp 1953 suggests it is not a *Cercospora*.

Laburnum x watereri (Kirchn.) Dipp. Goldenchain

FUNGI

Fusarium sp.—Twig blight (Plant Dis. Rptr. Sup. 65)
Nectria cinnabarina (Tode) Fr. (Imp. St. *Tubercularia*)—On branches (C) CMI Mycol. Paper No. 73
Phomopsis sp.—Canker (CWE)
Polyporus tulipiferae (Schw.) Overholts [*Irpex lacteus* (Fr.) Fr.]—Wood rot (C) Overholts 1953

Lathyrus odoratus L. Sweetpea

BACTERIA

Corynebacterium fascians (Tilford) Dows.—Fasciation (OS, CWE) J. Agr. Res. 53:383

FUNGI

Glomerella cingulata (Ston.) Spauld. & Schrenk.—Anthracnose blight (PDI) CMI 315
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OAES Bull. 511; CWE)
Rhizoctonia solani Kuehn—Root rot (PDI)
Thielaviopsis basicola (Berk. & Br.) Ferr.—Black root rot (Miller, M.Sc. Thesis, OSU 1929) Phytopath. 25:1011; CMI 170

L. palustris L. Marsh pea vine

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS, OC)

Lespedeza sp. Bush-clover

FUNGI

Microsphaera diffusa Clint. & Pk.—Powdery mildew (Ohio J. Sci. 66:570)

L. capitata Michx.

FUNGI

Phyllachora lespedezae (Schw.) Sacc.—Tar spot (OS)

L. hirta (L.) Hornem. Hairy bush-clover

FUNGI

Uromyces lespedezae-procumbentis (Schw.) Curt.—Rust (OS) On this and the following species.

L. intermedia (S. Wats.) Britt.

L. repens (L.) Bart.

L. violacea (L.) Pers.

L. virginica (L.) Britt.

Lotus corniculatus L. Birdsfoot trefoil

FUNGI

Rhizoctonia solani Kuehn—Stem canker (AFS)
Sclerotinia sp.—Crown and stem rot (CWE)
Stemphylium loti Graham (*S. sarcinaeforme* (Cav.) Wiltshire leafspot (OS) Dickson 1956; Phytopath. 43:577

Lupinus perennis L. Lupine

FUNGI

Erysiphe polygoni DC.—Powdery mildew (OS)

Medicago lupulina L. Black medic, hop clover

FUNGI

Cercospora medicaginis Ell. & Ev.—Leaf spot (CWE)
Uromyces striatus Schroet.—Rust (OS) Cummins 1978

M. sativa L. Alfalfa, lucerne. General reference— Compendium of Alfalfa Diseases. 1979. American Phytopathological Society.

BACTERIA

Corynebacterium insidiosum (McCull.) H.L. Jensen—Bacterial wilt (CWE) See Davis 1986
Xanthomonas campestris pv. *alfalfae* (Riker et al.) Dye—Bacterial leaf spot (LHR) CMI 698

FUNGI

Aphanomyces euteiches Drechs.—Root rot (AFS) Scott 1961; USDA Tech. Bull. 1485
Cercospora medicaginis Ell. & Ev.—Leaf spot (CWE, OS)
Colletotrichum dematium f. *truncata* (Schw.) Arx—Mostly saprophytic (LHR)
C. destructivum O'Gara—Anthracnose (LHR) Arx 1970
C. trifolii Bain & Essary—Anthracnose (OS) Arx 1970; Mycologia 46:52
Fusarium oxysporum Schlecht.—Associated with roots & seedlings (AFS) Phytopath. 54:1012

F. roseum (Lk.) Snyder & Hans.—Associated with roots & seedlings (AFS) Phytopath. 54:1012
F. solani (Mart.) App. & Wr.—Root rot, seedling blight (AFS) Ibid.
Leptosphaerulina briosiana (Poll.) Graham & Luttrell (*Pseudoplea b.* Poll.)—Lepto leaf spot (CWE) Phytopath. 51:680; CMI 146; Aust. J. Bot. 33:233
Leptotrochila medicaginis (Fckl.) Schuepp (*Pseudopeziza jonesii* Nannf., Imp. St. *Sporonema phacidoides* Desm.)—Yellow leaf blotch (OS, CWE) Sutton 1980; Dickson 1956
Mycotetradiscus terrestris (Gerd.) Ostazeski—Crown and root rot (LHR) Mycologia 59:970
Peronospora trifoliorum dBy.—Downy mildew (OS) CMI 768
Phoma medicaginis Malbr. & Roum. (*P. herbarum* Westd. f. sp. *medicaginis* Westd.; *Ascochyta imperfecta* Pk.)—Blackstem and leaf spot (OS) Sutton 1980; Netherlands J. Plant Path. 71:79; Mycotaxon 29:477
Phytophthora megasperma Drechs.—Root rot (AFS) CMI Mycol. Paper No. 122; CMI 115
Pseudopeziza medicaginis (Lib.) Sacc.—Common leaf spot (OS) CMI 637
Pythium aphanidermatum (Eds.) Fitz.—Damping-off, root rot (AFS) Phytopath. 54:1012-1018
P. debaryanum Hesse.—Damping off, root rot (AFS) Ibid. (Not now considered a valid species. See Plaats-Niterink 1981)
P. irregulare Buis.—Damping off, root rot (AFS) Phytopath. 54:1012-1018
P. oligandrum Drechs.—From seedlings (AFS) Ibid.
P. paroeandrum Drechs.—Damping off, root rot (AFS) Ibid.
P. rostratum Butl.—From seedlings (AFS)
P. ultimum Trow.—Damping off, root rot (AFS) Phytopath. 54:1012-1018
Rhizoctonia solani Kuehn.—Root rot and stem blight (OAES Bull. 725; LHR) Ibid.
Sclerotinia trifoliorum Erikss.—Crown and stem rot (OS) Mycotaxon 9:365; Can. J. Res. 11:474; Phytopath. 45:421
Stagonospora meliloti (Lasch) Petr. (Perf. St. *Leptosphaeria pratensis* Sacc. & Briard)—Leaf spot (OS, CWE)
Stemphylium botryosum Wallr. [Perf. St. *Pleospora herbarum* (Pers.) Rab.]—Leaf spot (OS) CMI 150
Thielaviopsis basicola (Berk. & Br.) Ferr.—Root rot (LHR) CMI 170
Uromyces striatus Schroet.—Rust (OS) Cummins 1978
Verticillium albo-atrum Reinke & Berth.—Wilt (LHR) CMI 255, 256

NEMATODES

Meloidogyne hapla Chitwood, 1949—Root knot (RMR)
Pratylenchus penetrans (Cobb) Filipjev & Stekhoven—Lesion nematode (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Alfalfa mosaic virus—Mosaic (LHR, STN) CMI/AAB No. 46

INSECTS, MITES

Potato leafhopper—Yellowing (CWE)

ABIOTIC

Potassium deficiency—White marginal leaf spots (CWE)

Melilotus alba Desr. White sweetclover

FUNGI

Ascochyta meliloti (Trel.) Davis (Perf. St. *Mycosphaerella lethalis* Stone)—Black stem (OC, PDI) ? Same as *Stagonospora meliloti*
Cercospora davisii Ell. & Ev. (Perf. St. *Mycosphaerella davisii* Jones)—Leaf spot (OS) Mycologia 35:518; Phytopath. 53:500
Phytophthora megasperma Drechs.—Root rot (AFS) CMI 115
Pythium sp.—Root rot, seedling blight (PDI)
Stagonospora meliloti (Lasch) Petr. (Perf. St. *Leptosphaeria pratensis* Sacc. & Briard)—Leaf spot (OS) J. Agr. Res. 57:791

M. officinalis (L.) Lam. Yellow sweetclover

FUNGI

Cercospora davisii Ell. & Ev.—Leaf spot (CWE) See *M. alba*

Phaseolus sp. Lima bean. General reference USDA Tech. Bull. 868. 1957

BACTERIA

Xanthomonas campestris pv. *phaseoli* (Smith) Dye—Blight (OS; PDI)

FUNGI

Cercospora cruenta Sacc.—Leaf spot (OS)
C. canescens Ell. & Martin (Reported, but doubtful)
Colletotrichum dematium f. *truncata* (Schw.) Arx—Stem anthracnose (C) Arx 1970
C. lindemuthianum (Sacc. & Magn.) Briosi & Cav.—Anthracnose (USDA Tech. Bull. 868) CMI 316
Diaporthe phaseolorum (Cke. & Ell.) Sacc.—Pod blight (PDI) Wehmeyer 1933; CMI 336
Fusarium solani (Mart.) Sacc.—Root rot (PDI)
Phytophthora infestans var. *phaseoli* (Thaxter) Leonian (*P. phaseoli* Thaxter)—Downy mildew, pod rot (C) Walker 1952
Rhizoctonia solani Kuehn—Stem rot (PDI)
Uromyces appendiculatus (Pers.) Unger—Rust (PDI) Cummins 1978

P. aureus Roxb. Mung bean. See *Vigna radiata*

P. vulgaris L. Common garden bean. General reference—USDA Tech. Bull. 868. 1957

BACTERIA

Corynebacterium flaccumfaciens (Hedges) Dowson—Wilt (PDI; USDA Tech. Bull. 868)
Pseudomonas syringae pv. *phaseolicola* (Burkholder) Young et al.—Halo blight (OS, CWE; USDA Tech. Bull. 868)
Xanthomonas campestris pv. *phaseoli* (Smith) Dye—Blight (USDA Tech. Bull. 868)

FUNGI

Colletotrichum lindemuthianum (Sacc. & Magn.) Briosi & Cav.—Anthracnose (OS) CMI 316
Erysiphe polygoni DC.—Powdery mildew (Ohio J. Sci. 66:570)
Fusarium solani (Mart.) Sacc.—Root rot (PDI)
Isariopsis griseola Sacc. (*Phaeoisariopsis* g.)—Angular leaf spot (C, CWE) USDA Tech. Bull. 868; CMI No. 847
Pythium debaryanum Hesse—Damping-off (PDI) Not now considered a valid species. See Plaats-Niterink 1981
P. ultimum Trow—Damping-off, seedling blight (AFS)
Rhizoctonia solani Kuehn—Root, pod, and stem rot (C)
Sclerotinia sclerotiorum (Lib.) dBy.—White mold, stem rot (C) Mycotaxon 9:365
Thielaviopsis basicola (Berk. & Br.) Ferr.—Black root rot (Report by Van Pelt, OAES, 1915)
Uromyces appendiculatus (Pers.) Unger—Rust (OS, C) Cummins 1978; CMI 57

NEMATODES

Meloidogyne hapla Chitwood—Root knot (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Bean common mosaic virus—Mosaic (Jones, Ph.D. Dissertat. OSU 1974) CMI/AAB No. 73
 Bean yellow mosaic virus—Yellow mosaic (C, AFS) CMI/AAB No. 40

Pisum sativum L. Garden pea. General reference—Compendium of Pea Diseases. 1984. American Phytopathological Society

BACTERIA

Pseudomonas syringae pv. *pisi* (Sackett) Young et al.—Bacterial blight (Plant Dis. Rptr. Sup. 67)

FUNGI

Aphanomyces euteiches Drechs.—Root rot (Jour. Agr. Res. 30:293) Scott 1961; USDA Tech. Bull. 1485
Ascochyta pisi Lib.—Leaf and pod spot (OAES Bull. 173) Sutton 1980
Erysiphe polygoni DC. (*E. pisi* Syd.)—Powdery mildew (Ibid.)
Fusarium oxysporum Schlecht.—Wilt (Plant Dis. Rptr. Sup. 67)
F. solani (Mart.) Sacc.—Root rot (Plant Dis. Rptr. Sup. 45)
Peronospora viciae (Berk.) dBy.—Downy mildew (Plant Dis. Rptr. Sup. 67)
Phoma medicaginis var. *pinodella* (Jones) Boerema (*Ascochyta pinodella* Jones)—Foot rot (Ibid.) Sutton 1980; Mycotaxon 28:241.

Pythium spp.—Seed decay and seedling blight (CWE)
Rhizoctonia solani Kuehn—Root rot (PDI)
Septoria pisi West.—Leaf blotch (Plant Dis. Rptr. Sup. 3)

VIRUSES, VIROIDS, MYCOPLASMAS

Virus—Mosaic (PDI)

NEMATODES

Meloidogyne sp.—Root knot (OAES Bull. 451)

***Robinia pseudo-acacia* L. Black locust**

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot.—Canker (ODA)
Cylindrosporium robiniae (Lib.) Died.—Leaf spot (OS, CWE)
Fomes rimosus (Berk.) Cke. (*Phellinus rimosus* (Berk.) Pilat)—Heart rot (CWE; Mycologia 65:192) Overholts 1953
Fusicladium robiniae Shear [*Phaeoisariopsis robiniae* (Shear) Deighton]—Reddish-brown leaf spot (OS) Ellis 1976; CMI 849
Oidium sp. (?*Microsphaera*)—Powdery mildew (CWE)
Phomopsis oncostoma (Thuem.) Hoehn. [Perf. St. *Diaporthe oncostoma* (Duby) Fckl.]—Canker and dieback (OS) Wehmeyer 1933
Polyporus robinophilus (Murr.) Lloyd—White spongy heart rot (OAES Bull. 214) Overholts 1953
P. sulfureus Bull. ex Fr. (*Laetiporus sulfureus*)—Brown cubical heart rot (CWE) Overholts 1953; CMI 441

VIRUSES, VIROIDS, MYCOPLASMAS

Mycoplasma-like organism—Witches'-broom (CES) J. Aboriculture, Jan. 1976

***Sophora japonica* L. Japanese pagoda-tree**

FUNGI

Diplodia sophorae Speg. & Sacc.—Dieback (PDI)

***Spartium junceum* L. Spanish broom**

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

***Strophostyles helvola* (L.) Eil. Wild bean**

FUNGI

Phyllosticta phaseolina Sacc.—Leaf spot (OS)
Uromyces appendiculatus (Pers.) Unger—Rust (OS)

***Tephrosia virginiana* (L.) Pers. Hoary pea**

FUNGI

Ravenelia epiphylla (Schw.) Diet.—Rust (OS) Cummins 1978

***Trifolium hybridum* L. Alsike clover**

FUNGI

Cymadothea trifolii (Pers.) Wolf (Imp. St. *Polythrincium*)—Sooty blotch (OS, CWE) Mycologia 27:58; CMI 393
Erysiphe polygoni DC.—Powdery mildew (CWE)
Rhizoctonia solani Kuehn—Brown patch, root rot (PDI)
Stagonospora melliloti (Lasch) Petr.—Leaf spot (OS) Ellis & Ellis 1985; Dickson 1956
Uromyces trifolii-repentis Liro—Rust (OS, CWE) Cummins 1978

***T. pratense* L. Red clover**

BACTERIA

Pseudomonas syringae pv. *syringae* van Hall—Bacterial leaf spot (CWE) may be *P. andropogonis* (Smith) Stapp

FUNGI

Cercospora zebrina Pers.—Leaf spot (OS) Phytopath. 53:500; CMI 938
Colletotrichum trifolii Bain & Essary—Southern anthracnose (OS) Mycologia 46:52
Cymadothea trifolii (Pers.) Wolf (Imp. St. *Polythrincium*)—Sooty blotch (CWE, OS) Mycologia 27:58; Dickson 1956; CMI 393

Erysiphe polygoni DC.—Powdery mildew. Known in Ohio only in the imperfect state (CWE) Phytopath. 56:309-318, 795-798, 940-943, 957-962.

Fusarium spp.—Associated with crown and root tissues (PDI)
Kabatiella caulivora (Kirchn.) Karak.—Northern anthracnose (CWE, OS) Dickson 1956

Pseudopeziza trifolii (Fr.) Fckl.—Common leaf spot (OS) CMI 636
Rhizoctonia leguminicola Gough & Elliott—Black patch (CWE) West Virginia Agr. Exp. Sta. Bull. 351T, 1952

R. solani Kuehn—Root rot, seedling blight (AFS)
Sclerotinia trifoliorum Erikks.—Stem & crown rot (OS) Mycotaxon 9:365
Sporonema trifolii (Pk.) Greene—Leaf spot (PDI)

Stagonospora recedens (O. Massal.) Jones & Weimer—Leaf spot (OS, CWE) J. Agr. Res. 57:807

Stemphylium sarcinaeforme (Cav.) Wiltshire—Target leaf spot (OS) Dickson 1956; Fungi Canadense No. 233.

Uromyces trifolii-repentis Liro—Rust (OS)

VIRUSES, VIROIDS, MYCOPLASMAS

Virus—Mosaic and other virus-like symptoms are frequently observed on red clover (CWE). Specific viruses not identified.

***T. procumbens* L. Low hop clover**

FUNGI

Erysiphe polygoni DC.—Powdery mildew (CWE)

***T. repens* L. White clover**

BACTERIA

Pseudomonas syringae pv. *syringae* Van Hall—Leaf spot (CWE)

FUNGI

Cercospora zebrina Pass.—Leaf spot (OS) Phytopath. 53:500; CMI 938

Cymadothea trifolii (Pers.) Wolf (Imp. St. *Polythrincium*)—Sooty blotch (CWE) Mycologia 27:58; CMI 393

Leptosphaerulina trifolii (Rostr.) Petr.—Pepper spot (PDI) Phytopath. 51:680; Aust. J. Bot. 33:233; CMI 146

Rhizoctonia solani Kuehn—Leaf blight, brown patch (CWE)

Stagonospora melliloti (Lasch) Petr.—Leaf spot (OS) Dickson 1956; Ellis & Ellis 1985

VIRUSES, VIROIDS, MYCOPLASMAS

Bean yellow mosaic virus—Mosaic (Jones, Ph.D. Dissertat. OSU 1974) CMI/AAB No. 40

***Vicia americana* Muhl. Vetch**

FUNGI

Uromyces viciae-fabae Schroet.—Rust (OS) Cummins 1978

***V. faba* L. Broadbean**

FUNGI

Ascochyta pisi Lib.—Leaf spot (PDI) Amer. Phytopathological Society, Compendium of Pea Diseases, 1984; Walker 1952

***V. villosa* Roth Hairy vetch**

FUNGI

Ascochyta pisi Lib.—Leaf and pod spot (OS) Ibid.

Kabatiella nigricans (Atk. & Edg.) Karak.—Stem and pod spot (PDI) Arx 1970

***Vigna radiata* (L.) R. Wilcz. (*Phaseolus aureus* Roxb.) Mung bean**

BACTERIA

Pseudomonas syringae pv. *phaseolicola* (Burkh.) Young et al.—Halo blight (Phytopath. 61:909; AFS)

FUNGI

Pythium ultimum Trow—Root rot (AFS)

V. sinensis (Torner) Savi Cowpea

FUNGI

Oidium sp.—Powdery mildew on plants in the greenhouse (CWE)

Wistaria sp. Wistaria

BACTERIA

Agrobacterium tumefaciens (E.F. Sm. & Towns.) Conn—Crown gall (OS)

FUNGI

Oidium sp.—Powdery mildew (CWE)

LILIACEAE

Allium canadense L. Meadow garlic

FUNGI

Uromyces bicolor Ell.—Rust (OS)

**A. cepa L. Common onion. General references—
USDA Agr. Handbook No. 208; Walker 1952**

BACTERIA

Erwinia carotovora (L.R. Jones) Holland—Soft rot (Month. Bull. Ohio. Agr. Exp. Sta. 4:75)

FUNGI

Alternaria porii (Ell.) Cif.—Purple blotch (PDI) Ellis 1971

Aspergillus niger v. Teigh.—Black mold rot (OS)

Botrytis allii Munn (*B. aclada* Fresen.)—Neck rot (OS) Coley Smith et al 1980; Ellis 1971; CMI 433

B. byssoidea Walker—Mycelial neck rot (Althaus, M.Sc. Thesis, OSU 1951) Ibid.

B. squamosa Walker—Tip and leaf blight (PDI) Ibid.

Colletotrichum circinans (Berk.) Vogl. [*C. dematium* f. *circinans* (Berk.) Arx]—Smudge (OS) Arx 1970; Walker 1952

Fusarium spp.—Associated with root and bulb rots (CWE, PDI)

Fusarium oxysporum Schlecht.—Bulb rot (USDA Misc. Pub. 440)

Peronospora destructor (Berk.) Casp.—Downy mildew (OS) CMI 456; Hilgardia 14:595

Puccinia asparagi DC.—Rust (CWE) Checked by G.B. Cummins
Pyrenochaeta terrestris (Hans.) Gorenz, Walker, & Larson (*Phoma t.*)—Pink root (OS) Walker 1952; CMI 397

Rhizoctonia solani Kuehn—Damping-off, root rot (PDI)

Sclerotinia sclerotiorum (Lib.) dBy.—Watery soft rot (PDI) Mycotaxon 9:365

Sclerotium cepivorum Berk.—White rot (PDI; Ohio Agr. Exp. Sta. Bull. 214—reported but probably not this fungus)

Stemphylium botryosum Wallr.—Black mold, probably secondary (PDI)

Urocystis colchici (Schlecht.) Rabenh. (*U. cepulae*)—Smut (OS) Ohio Agr. Exp. Sta. Bull. 122; CMI 298

NEMATODES

Meloidogyne sp.—Root knot (JDW; OAES BiMonth. Bull. 21:21-25)

A. cernuum Roth Nodding wild onion

FUNGI

Septoria sp.—Leaf blight (CWE)

A. sativum L. Garlic

FUNGI

Aspergillus niger v. Tiegh.—Black mold (OS)

Fusarium sp.—Bulb rot (USDA Misc. Pub. 440)

Sclerotium cepivorum Berk.—White rot (C) CMI 512; Trans. Brit. Mycol. Soc. 79:534

A. tricoccum Ait. Wild leek, ramp

FUNGI

Septoria viridi-tingens Curt.—Leaf spot (CWE)

Uromyces bicolor Ell.—Rust (CWE)

A. vineale L. Field garlic

FUNGI

Gladosporium allii (Ell. & Martin) P.M. Kirk (*Heterosporium allii*)—Leaf spot (CWE) CMI 841

Asparagus officinalis L. Apsaragus

BACTERIA

Erwinia carotovora (L.R. Jones) Holland—Soft rot (PDI)

FUNGI

Penicillium sp.—Storage rot of roots (C)

Puccinia asparagi DC.—Rust (OS) Ill. Agr. Exp. Sta. Bull. 559

Aspidistra elatior Blume

FUNGI

Colletotrichum sp.—Leaf spot (C)

Chlorophytum comosum (Thunb.) Jacques Spider plant

ABIOTIC

Fluoride toxicity or boron toxicity—Brown tip blight (C, CWE)

Colchicum autumnale L. Autumn crocus

FUNGI

Urocystis colchici (Schlecht.) Rabenh.—Smut (PDI)

Convallaria majalis L. Lily-of-the-valley

FUNGI

Botrytis cinerea Pers.—Gray mold blight (CWE)

Gloeosporium convallariae All.—Leaf spot (CWE) Possibly

Kabatiella; see Arx 1970

Septoria sp.—Leaf spot (C)

Eremurus robustus (Regel) Regel Desert-candle

FUNGI

Myrothecium roridum Tode ex Fr.—Leaf spot (PDI) CMI 253

Erythronium albidum Nutt. White fawn-lily

FUNGI

Ustilago heufleri Fckl.—Smut (Ohio J. Sci. 59:313)

E. americanum Ker Yellow fawn-lily, dog's-tooth-lily

FUNGI

Synchytrium sp.—Leaf gall (CWE) Karling 1964

Urocystis erythronii Clint.—Leaf smut (Fischer 1953)

Ustilago heufleri Fckl.—Leaf smut (OS)

E. rostratum Wolf Beaked yellow fawn-lily

FUNGI

Ustilago heufleri Fckl.—Smut (CWE)

Hemerocallis fulva L. Daylily

FUNGI

Collecephalus sp.—Leaf streak (PK) Phytopath. 63:864

Hosta sp. Plantain-lilly

FUNGI

Colletotrichum sp.—Leaf blight (CWE)

Hyacinthus orientalis L. Hyacinth

BACTERIA

Erwinia carotovora (L.R. Jones) Holland—Soft rot (PDI)

FUNGI

Botrytis sp.—Gray mold blight (C)

Lilium spp. Garden lily

FUNGI

Botrytis cinerea Pers.—Leaf & flower blight (PDI)
Fusarium oxysporum Schlecht.—Rot of scales (PDI)
Phytophthora cactorum Leb. & Cohn—Stem rot (PDI) CMI 111
P. parasitica Dast.—Top stem rot (CWE, AFS) CMI 35

L. canadense L. Wild Canada lily

FUNGI

Botrytis cinerea Pers.—Leaf blight (CWE)

L. longiflorum Thunb. Easter lily

FUNGI

Botrytis cinerea Pers.—Flower blight (CWE)
Phytophthora parasitica Dast.—Stem rot (C) CMI 35
Pythium splendens Braun—Root rot (AFS) CMI 120
Rhizoctonia solani Kuehn—Root rot (CCP)

VIRUSES, VIROIDS, MYCOPLASMAS

Virus complex—Necrotic fleck (CWE)

L. superbum L. Turk's-cap lily

FUNGI

Uromyces holwayi Lagerh.—Rust (OS)

Liriope sp. Lily-turf

FUNGI

Colletotrichum (?*dematium*) (Pers. ex Fr.) Grove—Leaf blight (PK, CWE)

Maianthemum canadense Desf. False lily-of-the-valley

FUNGI

Cercospora maianthemii Fckl.—Leaf spot (OS)
Ramularia subsanguinea (Ell. & Ev.) Savile—Leaf spot (PDI)

Ornithogalum umbellatum L. Star-of-Bethlehem

FUNGI

Cladosporium ornithogali (Klotzsch) de Vries (*Heterosporium o. Klotzsch* ex Cke.; Perf. St. *Didymellina ornithogali* Jacques)—Leaf spot (Plant Dis. Rptr. 25:200) Ellis 1976

Polygonatum biflorum (Walt.) Ell. Solomon's-seal

FUNGI

Phyllostictina cruenta (Fr.) Petr. & Syd. [*Sphaeropsis c.* (Fr.) Gilman & Archer]—Leaf spot (OS) Fungi Canadenses No. 278; See Aa, H.A. van der. 1973. Stud. Mycol. 5:1-110 for comments on the genus *Phyllostictina*.
Puccinia sessilis Schneid.—Rust (PDI)

P. commutatum (Schultes f.) A. Dietr. Great Solomon's-seal

FUNGI

Phyllostictina cruenta (Fr.) Petr. & Syd. [*Sphaeropsis c.* (Fr.) Gilman & Archer]—Leaf spot (OS) See *P. biflorum*

Smilacina racemosa (L.) Desf. False Solomon's-seal

FUNGI

Phyllostictina cruenta (Fr.) Petr. & Syd. [*Sphaeropsis c.* (Fr.) Gilman & Archer]—Leaf spot (OS) Ibid.
Septoria smilacinae Ell. & G. Martin—Leaf spot (OS)

S. stellata (L.) Desf. Starry false Solomon's-seal

FUNGI

Phyllostictina cruenta (Fr.) Petr. & Syd. [*Sphaeropsis c.* (Fr.) Gilman & Archer]—Leaf spot (OS) Fungi Canadenses No. 278

Smilax sp. Greenbrier, catbrier

FUNGI

Cercospora smilacis deThuemen—Leaf spot (Plant Dis. Rptr. 27:26) May not be this species. See Chupp 1953.

Smilax bona-nox L.

FUNGI

Puccinia smilacis Schw.—Rust (Plant Dis. Rptr. 25:195) Host species may not have been correctly identified.

S. glauca Walt. Glaucous greenbrier

FUNGI

Puccinia smilacis Schw.—Rust (OS)

S. rotundifolia L. Round-leaf greenbrier

FUNGI

Dothiorella smilacina (Pk.) Petr. & Syd.—Leaf spot (OS) (This may be a *Phyllosticta* or *Macrophoma*)
Phyllostictina cruenta (Fr.) Petr. & Syd. [*Sphaeropsis c.* (Fr.) Gilman & Archer]—Leaf spot (OS) Fungi Canadenses No. 278; See *Polygonatum*
Puccinia smilacis Schw.—Rust (OS)

S. tannoides L. (*S. hispida* Muhl.) Hispid greenbrier

FUNGI

Cercospora petersii (Berk. & Curt.) Atk.—Leaf spot (OS)
Puccinia smilacis Schw.—Rust (OS)

Trillium erectum L. Ill-scented trillium

FUNGI

Uromyces halstedii DeT.—Rust (5th Ann. Rpt. Ohio Acad. Sci.)

T. flexipes Raf.

FUNGI

Septoria trillii Pk.—Leaf spot (CWE)

T. grandiflorum (Michx.) Salisb. Large-flowered trillium

FUNGI

Cylindrogloeum trillii (Ell. & Ev.) Arx (*Gloeosporium t.* Ell. & Everh.)—Leaf spot (CWE) Arx 1970
Phyllosticta trillii Ell. & Ev.—Leaf spot (CWE)
Septoria trillii Pk.—Leaf spot (OS)
Uromyces halstedii DeT.—Rust (CWE, OS)

T. sessile L. Sessile trillium, wake-robin

FUNGI

Colletotrichum peckii (Sacc.) J.J. Davis (*C. dematium* (Pers. ex Fr.) Grove)—Leaf blight (OS, CWE) Phytopath. Z. 29:413
Septoria trillii Pk.—Leaf spot (OS)

Tulipa sp. Tulip. General reference—Diseases of tulips. Wash. St. Univ. Ext. Bull. 711. 1979.

FUNGI

Botrytis tulipae Lind—Leaf and flower blight; fire; bulb rot (CWE) Persoonia 7:183; Ellis 1971
Fusarium sp.—Bulb rot (C)
Penicillium cyclopium Westling—Bulb decay (CWE)
Sclerotinia sp.—Bulb rot (PDI)
Sclerotium tuliparum Kleb. [*Rhizoctonia t.* (Kleb.) Whet. & Arthur]—Gray bulb rot (OS) Cornell Univ. Agr. Exp. Sta. Memoir 89

VIRUSES, VIROIDS, MYCOPLASMAS

Tulip breaking virus—Flower break; decline (CWE, PDI) CMI/AAB No. 71

Yucca (See Agavaceae)

LIMNANTHACEAE

Floerkea proserpinacoides Willd. False mermaid

FUNGI

Entyloma floerkeae Holw.—Smut (OS, CWE)

Peronospora floerkeae Kell.—Downy mildew (Ohio J. Sci. 70:218)

LINACEAE

Linum usitatissimum L. Common flax

FUNGI

Fusarium oxysporum Schlecht.—Wilt (Present in the mid to late 1800's in Ohio)

Melampsora lini (Pers.) Lev.—Rust (2nd Ann. Rpt. Ohio St. Bd. Agric. 1848. Reported as "rust.")

Septoria linicola (Speg.) Gar. (Perf. St. *Mycosphaerella linicola* Naum.)—Pasm, leaf spot (CWE) Dickson 1956; CMI 709

LOBELIACEAE

Lobelia sp.

FUNGI

Rhizoctonia solani Kuehn—Root rot (PDI)

Lobelia inflata L. Indian tobacco

FUNGI

Cercospora effusa (Berk. & Curt.) Ell.—Leaf spot (OS)

Entyloma lobeliae Farl.—Leaf smut (OS)

L. siphilitica L. Blue lobelia

FUNGI

Cercospora effusa (Berk. & Curt.) Ell.—Leaf spot (OS)

Puccinia lobeliae Ger. ex Pk.—Rust (OS)

Septoria lobeliae Pk.—Leaf spot (OS) Schwarze 1917

L. spicata Lam.

FUNGI

Septoria lobeliae Pk.—Leaf spot (OS) Ibid.

LYTHRACEAE

Decodon verticillatus (L.) Ell. Swamp loose strife

FUNGI

Cercospora nesaeae Ellis & Ev.—Leaf spot (OS)

Phyllosticta nesaeae Pk.—Leaf spot (OS)

Puccinia minutissima Arth.—Rust (OS)

Lagerstroemia indica L. Crape myrtle

FUNGI

Oidium sp.—Powdery mildew (CWE)

MAGNOLIACEAE

Liriodendron tulipifera L. Tulip-tree

FUNGI

Cephalosporium sp.—From wood (FB)

Cercospora liriodendri Ell. & Hark.—Leaf spot (OS) Chupp 1953 states this is more like *Brachysporium*, not *Cercospora*.

Cytospora sp.—On branches (C)

Erysiphe polygoni DC.—Powdery mildew (CWE; Ohio J. Sci. 66:570)

Fusarium sp.—Seedling root rot (ODNR)

Fusarium solani (Mart.) Sacc.—Canker (J. Forestry 60:331)

Gloeosporium liriodendri Ell. & Ev.—Leaf spot (USDA Plant Dis. Bull. Sup. 11) See Arx 1970, p. 136

Nectria magnoliae Lohman & Hepting—Canker (PDI) Lloydia 6:77 108

Phialophora sp.—From wood (FB) Mycologia 65:661

Pholiota adiposa (Fr.) Kummer—Wood rot (FB) Miller 1972. May be *P. aurivella*

Phyllosticta liriodendrica Sacc. (Perf. St. *Mycosphaerella* sp.)—Leaf spot (OS)

Rhizoctonia solani Kuehn—Seedling root rot (Plant Dis. Rptr. 21:82)

Verticillium albo-atrum Reinke & Berth.—Wilt (CWE) CMI 255, 256; Rev. Plant Pathol. 53:157

INSECTS, MITES

Thecodiplosis liriodendri O.S.—A leaf miner that causes injury much like a fungal leaf spot (CWE) Johnson & Lyon 1976

ABIOTICS

Temperature and moisture stress—Leaf scorch and yellowing (CWE) Common in landscape plantings resulting in early leaf drop

Magnolia sp.

FUNGI

Verticillium albo-atrum Reinke & Berth.—Wilt (C)

M. acuminata L. Cucumber tree

FUNGI

Phyllactinia guttata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

M. quinquepeta (Buch'hoz) Dandy (M. lilliflora Desr.) Lily magnolia

BACTERIA

Pseudomonas sp.—Bacterial leaf spot (CWE, PK)

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

M. x loebneri Kache

BACTERIA

Pseudomonas sp.—Bacterial leaf spot (CWE, PK)

M. x soulangiana Soul.-Bod. Saucer magnolia

BACTERIA

Pseudomonas sp.—Bacterial leaf spot (CWE, PK)

FUNGI

Oidium sp.—Powdery mildew (CWE)

Phyllosticta magnoliae Sacc.—Leaf spot (PDI)

M. stellata (Sieb. & Zucc.) Maxim. Star magnolia

BACTERIA

Pseudomonas sp.—Bacterial leaf spot (CWE)

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (CWE)

ABIOTIC

Iron deficiency—Chlorosis (E.M. Smith, OARDC Res. Cir. 263)

MALVACEAE

Abutilon pictum (Gillies ex Hook. & Arn.) Walp. cv. Thompsonii Variegated flowering maple

VIRUSES, VIROIDS, MYCOPLASMAS

Virus—Mosaic, variegation. The variegation of the above cultivar

is reportedly caused by a virus vectored by a species of whitefly. It is vegetatively propagated for the variegated symptoms. Vector not in USA.

A. theophrasti Medic. Velvet-leaf

FUNGI

Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis, OSU 1977)

Alcea rosea L. (Althaea r. L.) Hollyhock

FUNGI

Ascochyta althaeina Sacc. & Biz.—Leaf spot (OS)
Cercospora althaeina Sacc. (*C. kellermanii* Bub.)—Leaf spot (OS)
Colletotrichum malvarum (A. Braun. & Casp.) Southworth—Anthracnose (Plant Dis. Rptr. Sup. 37) Arx 1970
Phyllosticta althaeina Sacc.—Leaf spot (OS) Stevens 1913
Puccinia malvacearum Bert.—Rust (OS)
Pythium irregulare Buis.—Root rot (C; AFS)
Septoria malvicola Ell. & G. Martin—Leaf spot (OS)

Hibiscus esculentus L. Okra

FUNGI

Verticillium albo-atrum Reinke & Berth.—Wilt (C) CMI 255, 256

H. moscheutos L. Swamp rose-mallow

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew on hybrid segregates of crosses with this and other *Hibiscus* spp. (OS, CWE)
Puccinia schedonnardi Kell. & Sw.—Rust (OS)

Malva neglecta Wallr. Common mallow

FUNGI

Cercospora malvicola Ell. & G. Martin—Leaf spot (OS)
Puccinia malvacearum Bert.—Rust (OS)
Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis, OSU 1977)
Septoria malvicola Ell. & G. Martin—Leaf spot (OS)

Sida spinosa L. Prickly sida

FUNGI

Colletotrichum malvarum (Braun & Casp.) South.—Leaf and stem spot (CWE) Arx 1970
Puccinia heterospora Berk. & Curt.—Rust (OS)

MENISPERMACEAE

Menispermum canadense L. Moonseed vine

FUNGI

Cercospora menispermi Ell. & Holw.—Leaf spot (CWE)
Entyloma menispermi Farl. & Trel.—Leaf smut, white smut (OS)
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (OS)

MORACEAE

Broussonetia papyrifera (L.) Vent. Paper-mulberry

FUNGI

Fusarium solani (Mart.) Appel & Wr.—Canker (Plant Dis. Rptr. 51:531)

Cannabis sativa L. Hemp

FUNGI

Septoria cannabis (Lasch) Sacc.—Leaf spot (OS)

Dorstenia sp. Torus herb (OSU Botany greenhouse)

FUNGI

Oidium sp.—Powdery mildew (Ohio J. Sci. 66:570) Conidia are in

chains without fibrosin bodies; probably a species of *Erysiphe*

Ficus benjamina L. Weeping fig

FUNGI

Colletotrichum gloeosporioides (Penz.) Sacc.—Anthracnose leaf blight (C) Arx 1970
Phomopsis sp.—Dieback (CWE)

F. elastica Rob. ex Hornem. Rubber plant

FUNGI

Colletotrichum gloeosporioides (Penz.) Sacc.—Anthracnose leaf blight (C) Arx 1970
Phyllosticta sp.—Leaf spot (C)
Rhizoctonia solani Kuehn—Root rot (C)

Morus alba L. White mulberry

BACTERIA

Pseudomonas syringae pv. *mori* (Boyer & Lamb.) Young et al.—Bacterial blight and canker (CWE, PDI)

FUNGI

Cercospora moricola Cke.—Leaf spot (PDI)
Fusarium lateritium Nees [Perf. St. *Gibberella baccata* (Wallr.) Sacc.]—Twig blight (ODA, C) Nelson et al. 1983; CMI 310
Phyllactinia guttata (Wallr.) Lev.—Powdery mildew (MU)
Septogloeum mori (Lev.) Briosi & Cav. [*Phloeospora maculans* (Bereng.) Allesch.]—Leaf spot (CWE) Sutton 1980
Uncinula geniculata Gerard—Powdery mildew (MU)

M. rubra L. Red mulberry

FUNGI

Cercospora moricola Cke.—Leaf spot (PDI)
Phyllactinia guttata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)
Uncinula geniculata Gerard—Powdery mildew (OS)

MYRICACEAE

Comptonia peregrina (L.) Coult. Sweetfern

FUNGI

Cronartium comptoniae Arth.—Rust (PDI)

Myrica pennsylvanica Loisel. Bayberry

FUNGI

Phyllosticta myricae Cke.—Leaf spot (CWE)
Septoria ?myricae Ell. & Ev. (?*Septoria myricae* Trail)—Leaf spot (C, ODA) Grove 1935; Schwarze 1917

NYCTAGINACEAE

Mirabilis nyctaginea (Michx.) MacM. Umbrella-wort

FUNGI

Cercospora oxybaphi Ell. & Halst.—Leaf spot (Ohio Naturalist 13:36)

NYMPHAEACEAE

Nuphar advena (Ait.) Ait. f. Yellow waterlily, spatter dock

FUNGI

Mycosphaerella pontederiae (Pk.) House—Leaf blight (OS)

Nymphaea odorata Ait. Waterlily

FUNGI

Entyloma nymphaeae (Cunn.) Setch.—Leaf smut (CWE; Ohio J. Sci. 59:313)

NYSSACEAE

Nyssa sylvatica L. Sour gum, tupelo

FUNGI

Dothiorella sp.—Twig blight; canker (CWE)
Polyporus delectans Pk. [*Spongipellis d.* (Pk.) Murr.]—White spongy wood rot (FB) Overholts 1953

PARASITIC SEED PLANTS

Phoradendron sp.—Mistletoe (Sinclair et al 1987)

INSECTS, MITES

Eriophyes sp. (gall mite)—Leaf edge roll (CWE) Keifer et al 1982

OLEACEAE

Forsythia x intermedia Zab. Forsythia, golden bells

BACTERIA

Pseudomonas syringae vanHall—Bacterial blight (CWE)

FUNGI

Phomopsis sp.—Stem gall (CWE)
Phytophthora parasitica Dast.—Twig blight; dieback (AFS)
Sclerotinia sclerotiorum (Lib.) dBy.—Stem dieback (CWE)

Fraxinus sp.

FUNGI

Cytospora sp.—On twigs; ? canker (CWE, PDI)
Dothiorella sp.—On stems (C)
Favolus alveolaris (DC. ex Fr.) Quel.—Wood rot (PDI) Overholts 1953
Fomes spp.—Wood rot, decay (PDI)
Polyporus spp.—Wood rot, decay (PDI)

Fraxinus americana L. White ash

FUNGI

Dendrothele griseo-cana (Bres.) Bourd. & Galz. [*Aleurodiscus g.* (Bres.) Hoehn. & Litsch.]—Bark patch (Mycologia 65:192)
Fomes fraxinophilus (Pk.) Sacc.—White mottled heart rot (USDA Plant Dis. Bull. Sup. 29) Overholts 1953
Gloeosporium aridum Ell. & Holw. [*Discula conidial state of Gnomonia errabunda* (Rob.) Auersw.]—Anthracnose leaf blight (OS) Arx 1970
Mycosphaerella effigurata (Schw.) House (Imp. St. reported as *Marssonina*, *Piggotia*, and *Cylindrosporium*)—Leaf spot (PDI)
Phyllactinia guttata (Wallr.) Lev.—Powdery mildew (OS)
Phyllosticta viridis Ell. & Kell. [Perf. St. *Mycosphaerella fraxinicola* (Schw.) House]—Leaf spot (OS) *Mycologia* 31:258
Poria fraxinophila (Pk.) Wright—Decay (Mycologia 65:192)
Puccinia sparganioides Ell. & Barth.—Rust (Ohio Naturalist 13:31)

F. nigra Marsh. Black ash

FUNGI

Mycosphaerella effigurata (Schw.) House (Imp. St. *Cylindrosporium*)—Leaf spot (PDI) See *F. americana*
Phyllactinia guttata (Wallr.) Lev.—Powdery mildew (OS)

F. ornus L. Flowering ash

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)
Phyllactinia guttata (Fr.) Lev.—Powdery mildew (Ibid.)

F. pennsylvanica Marsh. Green ash

FUNGI

Fomes fraxinophilus (Pk.) Sacc.—White mottled heart rot (LHR) Overholts 1953
Gloeosporium aridum Ell. & Holw.—Anthracnose leaf blight (CWE) See *F. americana*
Puccinia sparganioides Ell. & Barth.—Rust (OS)

F. quadrangulata Michx. Blue ash

FUNGI

Cristulariella moricola (Hino) Redhead (Perf. St. *Grovesinia pyramidalis* Cline et al.)—Zonate leaf spot (CWE) *Mycologia* 75:988
Gloeosporium aridum Ell. & Holw.—Anthracnose leaf blight (CWE) See *F. americana*

F. velutina Torr. Velvet ash

FUNGI

Gloeosporium aridum Ell. & Holw.—Anthracnose leaf blight (CWE) See *F. americana*

Ligustrum sp. Privet

FUNGI

Glomerella cingulata (Stonem.) Spauld. & Schrenk—Dieback (OS)
Pythium irregulare Buis.—Root rot (AFS)

L. vulgare L. Privet

FUNGI

Cercospora ligustri Roum.—Leaf spot (OS, CWE) Confirmed by Chupp
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

Syringa x chinensis Willd. Chinese lilac

FUNGI

Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570; CWE)

S. x persica L. Persian lilac

FUNGI

Oidium sp. (? *Microsphaera*)—Powdery mildew (ODA)

S. vulgaris L. Lilac

BACTERIA

Pseudomonas syringae vanHall—Bacterial blight (CWE, C) J. Agr. Res. 36:225

FUNGI

Alternaria sp.—On leaves (C)
Botryosphaeria obtusa (Schw.) Shoem. [*Physalospora o.* (Schw.) Cke., Imp. St. *Sphaeropsis*]—On twigs; ? dieback (PDI) Barr 1972
Cylindrocladium floridanum Sob. & Seym.—Cutting rot (Plant Dis. Rptr. 52:615) *Mycologia* 61:957; CMI 421
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

NEMATODES

Meloidogyne sp.—Root knot (PK, ODA)

ONAGRACEAE

Circaea quadrisulcata (Maxim.) French & Sav. Enchanter's nightshade

FUNGI

Puccinia circaea Pers.—Rust (OS)

Epilobium glandulosum var. *adenocaulon* (Haussk.) Fern. Willow-herb

FUNGI

Pucciniastrum epilobii Otth—Rust (OS)

Fuchsia magellanica Lam. Fuchsia

FUNGI

Botrytis cinerea Pers. (Perf. St. *Botryotinia*)—Seedling blight, leaf blight, and stem rot (C, CWE)
Phytophthora parasitica Dast.—Stem rot (AFS)
Pucciniastrum epilobii Otth—Leaf rust (CWE) Can. J. Bot. 40:1390; Plant Dis. Rptr. 48:99. Aecia on *Abies*

Pythium sp.—Root rot (C)
Rhizoctonia solani Kuehn—Root rot (C)
Thielaviopsis basicola (Berk. & Br.) Ferr.—Black root rot (C) CMI 170

***Gaura biennis* L.**

FUNGI

Septoria oenotherae West.—Leaf spot (OS)
Uromyces plumbarius Pk.—Rust (OS)

***Ludwigia palustris* (L.) Elliott Water purslane**

FUNGI

Puccinia jussiaeae Speg.—Rust (Arthur 1934)

***Oenothera biennis* L. Evening primrose**

FUNGI

Erysiphe polygoni DC.—Powdery mildew (OS)
Peronospora arthuri Farl.—Downy mildew (OS)
Puccinia dioicae P. Magn.—Rust (OS)
Septoria oenotherae West.—Leaf spot (CWE)
Uromyces plumbarius Pk.—Rust (CWE)

***O. laciniata* Hill.**

FUNGI

Uromyces plumbarius Pk.—Rust (PDI)

***O. missouriensis* Sims**

FUNGI

Oidium sp. (? *Erysiphe polygoni*)—Powdery mildew (ODA)

OPHIOGLOSSACEAE

***Ophioglossum vulgatum* L. Adder's tongue fern**

FUNGI

Curvularia crepini (Westend.) Boedijn.—Blight (OS, CWE) Plant Dis. Rptr. 40:756; Mycologia 81(5), 1989

ORCHIDACEAE

General reference—Burnett, H.C. 1974. Orchid diseases—Fla. Dept. Agr. and Consumer Serv. Bull. 10

***Cattleya* sp.**

FUNGI

Fusarium oxysporum Schlecht. f. sp. *cattleyae* Foster—Fusarium wilt (Phytopath. 45:599) Strider, Vol. 2, 1985. Described from Ohio—Foster, Ph.D. Dissertat. OSU 1954

VIRUSES, VIROIDS, MYCOPLASMAS

Virus—Blossom brown necrotic streak (Rosberg, Ph.D. Dissertat. OSU 1949) Plant Dis. Rptr. 48:936; Phytopath. 42:79

***Orchis spectabilis* L. Showy orchid**

FUNGI

Botrytis cinerea Pers.—Blossom blight (ODA)

***Phalaenopsis* sp.**

BACTERIA

Pseudomonas cattleyae (Pavarino) Savulescu—Brown spot (Burnett in Strider, Vol. 2, 1985)

FUNGI

Fusarium oxysporum Schlecht. f. sp. *cattleyae* Foster—Fusarium wilt (Tri-ology 17, No. 5, 1978, Fla. Dept. Agric.)

OXALIDACEAE

***Oxalis* sp. Wood sorrel**

FUNGI

Puccinia sorghi Schw.—Rust (OS)
Ustilago oxalidis Ell. & Tr.—Seed smut (PDI)

***O. europaea* Jord.**

FUNGI

Microsphaera russellii G.W. Clint.—Powdery mildew (OS)
Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis, OSU 1977)

***O. stricta* L.**

FUNGI

Microsphaera russellii G.W. Clint.—Powdery mildew (OS)

PAPAVERACEAE

***Papaver orientale* L. Oriental poppy**

BACTERIA

Xanthomonas campestris pv. *papavericola* (Bryan & McWhorter) Dye—Bacterial blight (PDI)

***P. rhoeas* L. Corn poppy**

BACTERIA

Xanthomonas campestris pv. *papavericola* (Bryan & McWhorter) Dye—Bacterial blight (PDI)

***Sanguinaria canadensis* L. Bloodroot**

FUNGI

Cylindrosporium circinans Wint.—Leaf spot (CWE)
Kabatiella sanguinariae (Ell. & Ev.) Arx (*Gloeosporium* s. Ell. & Everh.)—Leaf spot (CWE) Arx 1970

PHRYMACEAE

***Phryma leptostachya* L. Lopseed**

FUNGI

Septoria leptostachyae Ell. & Kell.—Leaf spot (Bull. Torrey Bot. Club. 11:15)

PHYTOLACCACEAE

***Phytolacca americana* L. Pokeweed**

FUNGI

Cercospora flagellaris Ell. & Martin—Leaf spot (OS)
Septoria phytactaenoides Berk. & Curt.—Leaf spot (Rpt. Geol. Survey Ohio 1893)

VIRUSES, VIROIDS, MYCOPLASMAS

Tobacco mosaic virus (TMV)—Mosaic (STN)

PINACEAE

***Araucaria*—See Araucariaceae**

***Larix* sp. Larch**

FUNGI

Valsa abietis Fr. (Imp. St. *Cytospora*)—On twigs (Plant Dis. Rptr. 16:41)
Rhizoctonia solani Kuehn—Seedling blight (PDI)

***Picea abies* (L.) Karst. Norway spruce**

FUNGI

Cytospora kunzei Sacc.—Canker (C, CWE) Phytopath. 45:686 and 71:941; Plant Dis. 67:383

Fusarium sp.—Seedling root rot (ODNR)
Rhizoctonia solani Kuehn—Damping-off (Reported by Selby)
Thelephora terrestris Ehr. ex Fr.—On nursery seedlings (OAES Bull. 446) May be mycorrhizal. Corner 1968

***P. glauca* (Moench) Voss White spruce**

FUNGI

Rhizosphaera kalkoffii Bubak—Needle cast (C) Funk 1985

***P. omorika* (Panc.) Purk. Serbian spruce**

FUNGI

Sphaeropsis sp.—Tip blight (CWE)

***P. pungens* Engelm. Colorado blue spruce**

FUNGI

Cytospora kunzei Sacc.—Canker (C, OS, CWE) Phytopath. 71:941; Plant Dis. 67:383

Rhizosphaera kalkoffii Bubak—Needle cast (C, CWE) CMI 656; Funk 1985

***Pinus* sp. Pine**

FUNGI

Fomes pini (Thore) Lloyd (*Phellinus*)—Red heart, red ring rot (PDI) Overholts 1953

F. pinicola (Swartz ex Fr.) Cke. (*Fomitopsis*)—Brown crumbly heart rot (PDI) Ibid.

Sooty mold fungi—Saprophytic fungi covering needles and stems, growing on exudates of scale and aphid insects.

***Pinus albicaulis* Engelm. Whitebark pine**

FUNGI

Lophodermium pinastri (Schrad.) Chev.—Needle cast (PDI) See *P. sylvestris*.

***P. banksiana* Lamb. Jack pine**

FUNGI

Atropellis tingens Lohman & Cash—Canker (J. Forestry 41:41-52) J. Wash. Acad. Sci. 30:255

Fomes spp.—Root, butt, & heart rots (PDI)

Polyporus schweinitzii Fr.—Root & butt rot (PDI) Overholts 1953

***P. contorta* Dougl. ex Loud. Lodgepole pine**

FUNGI

Atropellis tingens Lohman & Cash—Canker (J. Forestry 41:41) J. Wash. Acad. Sci. 30:255

Lophodermium pinastri (Schrad.) Chev.—Needle cast (Plant Dis. Rptr. Sup. 73) See *P. sylvestris*

***P. densiflora* Sieb. & Zucc. Japanese red pine**

FUNGI

Atropellis tingens Lohman & Cash—Canker (J. Forestry 41:41-52) J. Wash. Acad. Sci. 30:255

NEMATODES

Bursaphelenchus xylophilus (Steiner & Buhrer) Nickle—Pinewood nematode (RMR) Ohio Report 66:43

***P. echinata* Mill. Shortleaf pine**

FUNGI

Armillaria mellea (Vahl. ex Fr.) Kummer—Root and butt rot

Coleosporium helianthi (Schw.) Arth.—Needle rust (PDI)

C. inconspicuum Hedgc. & Long ex Arth.—Needle rust (PDI)

C. vernoniae Berk. & Curt.—Needle rust (Plant Dis. Rptr. 17:21)

Cronartium quercuum (Berk.) Miyabe ex Shirai—Pine-oak gall rust (USDA Tech. Bull. 978)

Heterobasidion annosum (Fr.) Bref. [*Fomes annosus* (Fr.) Cke.]—Annosus root rot (Plant Dis. Rptr. 45:980) CMI 192

***P. flexilis* James Limber pine**

FUNGI

Dothistroma pini Hulbary (Perf. St. *Scirrhia pini* Funk & Parker)—Red band needle blight (Ill. Nat. Hist. Survey Bull. Vol. 21, No. 7) CMI 368. The host in this report may be *P. monticola*, not *P. flexilis*.

***P. griffithii* McClelland Himalayan pine**

FUNGI

Cenangium ferruginosum Fr. [*C. abietis* (Pers.) Rehm]—Canker & dieback (OAES Bull. 470) Seaver 1951

***P. mugo* Turra Swiss mountain pine**

FUNGI

Coleosporium vernoniae Berk. & Curt.—Needle rust (Plant Dis. Rptr. 17:21)

Cronartium comptoniae Arth.—Sweetfern blister rust (PDI) USDA Cir. 217; CMI 579

Sphaeropsis sapinea (Fr.) Dyko & Sutton [*Diplodia pinea* (Desm.) Kickx]—Tip blight (C) Sutton 1980; Peterson 1981

***P. monticola* Dougl. Western white pine**

FUNGI

Dothistroma pini Hulbary (Perf. St. *Scirrhia pini* Funk & Parker)—Needle blight; red band (PDI) CMI 368; Peterson 1981

Lophodermium pinastri (Schrad.) Chev.—Needle cast (PDI) See *P. sylvestris*.

***P. nigra* Arnold Austrian pine**

FUNGI

Coleosporium vernoniae Berk. & Curt.—Needle rust (Plant Dis. Rptr. 17:21)

Cronartium comptoniae Arth.—Sweetfern blister rust (PDI; USDA Cir. 217) CMI 579

Dasyscypha ellisiana (Rehm) Sacc.—On twigs (PDI) Seaver 1951

Diplodia pinea—See *Sphaeropsis*

Dothistroma pini Hulbary (Perf. St. *Scirrhia pini* Funk & Parker)—Needle blight; red band (Ill. Nat. Hist. Survey Bull. Vol. 21, No. 7) CMI 368; Peterson 1981. *D. septospora* is correct name Sutton 1980

Sphaeropsis sapinea (Fr.) Dyko & Sutton [*Diplodia pinea* (Desm.) Kickx]—Tip blight (OS, C) Sutton 1980; Peterson 1981

NEMATODES

Bursaphelenchus xylophilus (Steiner & Buhrer) Nickle et al.—Pine wood nematode (RMR)

***P. palustris* Mill. Longleaf or southern yellow pine**

FUNGI

Coleosporium inconspicuum Hedgc. & Long ex Arth.—Needle rust (PDI)

***P. ponderosa* Dougl. ex Laws. Ponderosa or western yellow pine**

FUNGI

Coleosporium vernoniae Berk. & Curt.—Needle rust (OC)

Cronartium comptoniae Arth.—Sweetfern blister rust (Arthur 1934) USDA Cir. 217; CMI 579

Elytroderma deformans (Weir) Darker—Needle cast (Plant Dis. Rptr. 16:29) Funk 1985

Sphaeropsis sapinea (Fr.) Dyko & Sutton—Tip blight (C) See *P. nigra*.

***P. resinosa* Ait. Red pine**

FUNGI

Coleosporium asterum (Diet.) Syd.—Needle rust (OS)

Diplodia pinea—See *Sphaeropsis*

Dothistroma pini Hulbary (Perf. St. *Scirrhia pini* Funk & Parker)—Needle blight (Ill. Nat. Hist. Survey Bull. 21, No. 7) CMI 368; Peterson 1981.

See *P. nigra*

Fomes annosus (Fr.) Cke. [*Heterobasidion annosum* (Fr.) Bref.]—

Annosus root rot (ODNR) CMI 192; Overholts 1953
Pythium debaryanum Hesse—Root rot (Bimonth. Bull. OAES 12:46)
 Not now an accepted name. See Plaats—Niterink 1981.
Rhizoctonia solani Kuehn—Seedling blight (Ibid.)
Sphaeropsis sapinea (Fr.) Dyko & Sutton—Tip blight (C) See *P. nigra*.
Tympanis sp.—Canker (PDI)
Verticicladiella procera Kendrick (*Leptographium*)—Root decline
 (Forest insect and disease conditions in U.S. 1971, USDA) Plant Dis.
 64:277 and 67:679; Trans. Brit. Mycol. Soc. 85:81 (for recent nomen-
 clature).

NEMATODES

Bursaphelenchus xylophilus (Steiner & Buhner) Nickle et al—Pine-
 wood nematode (RMR) Ohio Report, May-June 1981

P. rigida Mill. Pitch pine

FUNGI

Atropellis tingens Lohman & Cash—Canker (Jour. Forestry 41:41-52)
 J. Wash. Acad. Sci. 30:255
Coleosporium asterum (Diet.) Syd.—Needle rust (OS)
C. campanulae Lev. ex Kickx—Needle rust (OS) Fungi Canadenses
 No. 218
C. vernoniae Berk. & Curt.—Needle rust (OS)
Cronartium quercuum (Berk.) Miyabe ex Shirai—Pine-oak gall rust
 (OS) Bull. Torrey Bot. Club 94:511; USDA Tech. Bull. 978
Hypoderma (Ploiderma) lethale Dearn.—On older needles (Plant
 Dis. Rptr. 16:30) Can. J. Bot. 45:1399
Sphaeropsis sapinea (Fr.) Dyko & Sutton [*Diplodia pinea* (Desm.)
 Kickx]—Tip blight (C) Sutton 1980

NEMATODES

Bursaphelenchus xylophilus (Steiner & Buhner) Nickle et al—Pinewood
 nematode (RMR; Ohio Report, May-June 1981)

P. strobus L. Eastern white pine

FUNGI

Armillaria mellea (Vahl. ex Fr.) Kummer (*Armillariella*)—Root and butt
 rot (FB, PDI) Miller 1972
Canangium ferruginosum Fr. [C. *abietis* (Pers.) Rehm]—On twigs, ?
 canker (OS; OAES Bull. 470; Phytopath. 1:180) Seaver 1951
Cronartium ribicola Fisch. ex Rabh.—Blister rust (OS)
Fusarium sp.—Seedling root rot (ODNR)
Heterobasidion annosum (Fr. ex Fr.) Bref. [*Fomes annosus* (Fr.) Cke.]—
 Annosus root rot (ODNR) CMI 192; Overholts 1953
Lophodermium pinastri (Schr.) Chev.—On dead needles, ? needle
 cast (PDI) CMI 567, 568; CMI Mycol. Paper No. 147; Funk 1985
Pestalotia sp. (*Pestalotiopsis*)—Needle blight (Llyodia 13:196)
Polyporus schweinitzii Fr.—Butt rot (CL, OARDC Res. Cir. 139 rev.)
 Overholts 1953
Thelephora terrestris Ehr. ex Fr.—Smothering disease of slow growing
 seedlings (OAES Bull. 446) May be mycorrhizal. Corner 1968
Verticicladiella procera Kendrick (*Leptographium procera*)—White
 pine root decline (Forest Insect and Disease Conditions in U.S., 1971.
 USDA) Plant Dis. 64:277 and 67:679. See Trans. Brit. Mycol. Soc.
 85:81 for recent nomenclature.

Sooty mold fungi—Saprophytic fungi growing on aphid and scale
 insect exudates (CWE)
Suillus americanus (Pk.) Snell—A mycorrhizal mushroom commonly
 associated with Eastern white pine in native and planted stands,
 beneficial. (CWE) Miller 1972

NEMATODES

Bursaphelenchus xylophilus (Steiner & Buhner) Nickle et al—Pinewood
 nematode (Ohio Report 66:43)

ABIOTIC

Air pollutants-ozone, sulfur dioxide—Chlorotic dwarf; needle tip
 necrosis and chlorotic mottle (NE Forest Exp. Sta., Delaware, OH)
 For. Sci. 16:46
 Iron deficiency—Chlorosis (E.M. Smith, OARDC Res. Cir. 263)

P. sylvestris L. Scots pine

FUNGI

Atropellis tingens Lohman & Cash—? Canker (PDI) J. Wash. Acad.
 Sci. 30:255
Coleosporium vernoniae Berk. & Curt.—Needle rust (Plant Dis. Rptr.
 17:21)
Cronartium comptoniae Arth.—Sweetfern blister rust (OS) USDA Cir.
 217; CMI 579
Diplodia pinea (Desm.) Kickx—See *Sphaeropsis*.
Dothistroma pini Hulbary (Perf. St. *Scirrhia pini* Funk & Parker)—
 Needle blight (Ill. Nat. Hist. Survey Bull. V. 21, No. 7) CMI 368; Peter-
 son 1981; Funk 1985. See Sutton 1980 for recent nomenclature.
Endocronartium harknessii (Moore) Y. Hiratsuka—Pine-pine gall rust
 (C, OS) Plant Dis. Rptr. 54:853 and 62:779
Lophodermium pinastri (Schr.) Chev.—? needle cast (C) See next
 entry.
L. seditiosum Minter, Staley & Millar—Needle cast (C; Plant Dis. Rptr.
 57:515). Most reports of *L. pinastri* in USA thought to be this species.
 CMI 567, 568; CMI Mycol. Paper 147; Funk 1985
Naemacycus minor Butin [*Cyclaneusma minus* (Butin) DiCosmo,
 Peredo & Minter]—Needle cast (CL, CWE, C) CMI 659; European
 J. Forest. Path. 13:206; Phytopath. 68:267; Funk 1985
Sphaeropsis sapinea (Fr.) Dyko & Sutton (*Diplodia pinea*)—Tip blight
 (C) Sutton 1980; Peterson 1981
Suillus luteus (L. ex Fr.) SFG—A mycorrhizal mushroom commonly
 associated with Scots pine and other 2, 3 needle pines (CWE) Miller
 1972

NEMATODES

Bursaphelenchus xylophilus (Steiner & Buhner) Nickle et al—Pinewood
 nematode (RMR; Ohio Report, May-June 1981)

P. thunbergii Parl. Japanese black pine

FUNGI

Dothistroma pini Hulbary (Perf. St. *Scirrhia pini* Funk & Parker)—Needle
 blight (ODA) CMI 368; Peterson 1981; Funk 1985. See *P. nigra*
Polyporus schweinitzii Fr.—Root and butt rot (PDI) Overholts 1953

P. virginiana Mill. Scrub pine

FUNGI

Coleosporium helianthi (Schw.) Arth.—Needle rust (Plant Dis. Rptr.
 17:22)
C. inconspicuum Hedgc. & Long ex Arth.—Needle rust (PDI)
Cronartium quercuum (Berk.) Miyabe ex Shirai—Eastern gall rust (OS,
 CWE) Bull. Torrey Bot. Club 94:511
Fomes pini Thore ex Fr.) Lloyd—Heart rot (Plant Dis. Rptr. 25:197)
 Overholts 1953. *Phellinus* of some authorities.
Heterobasidion annosum (Fr. ex Fr.) Bref. (*Fomes*)—Root & butt rot
 (Plant Dis. Rptr. 45:980) CMI 192
Hypoderma hedgecockii Dearn. (*Ploiderma h.*)—On older needles
 (Plant Dis. Rptr. 16:29) Can. J. Bot. 45:1399
Hypodermella sp.—Needle cast (PDI)
Lophodermium pinastri (Schr.) Chev.—? needle cast (OS) See
P. sylvestris.
Pisolithus tinctorius (Pers.) Coker & Couch—On roots; ectomycorrhizal
 (CWE)

Sequoia sempervirens (Lam.) Endl. Redwood

FUNGI

Botrytis sp.—Seedling blight (PDI)

Tsuga canadensis (L.) Carr. Canadian hemlock

FUNGI

Cytospora sp.—Canker (CWE)
Fabrella tsugae (Farlow) Kirschstein (*Didymascella*; *Keithia*)—Needle
 cast, ? saprophytic (C) USDA Agr. Handbook 386; Ainsworth et al
 1973; Mycologia 54:12
Fomitiporia tsugina Murr. [*Phellinus punctatus* (Fr.) Pilat]—Decay
 (Mycologia 65:192) Overholts 1953
Ganoderma tsugae Murr.—White spongy rot (CWE) Ibid.
Melampsora abietis-canadensis Ludwig ex Arth.—Needle and cone
 rust (OS)

M. farlowii (Arth.) J.J. Davis—Twig and needle rust (ODA, CWE, OS)
Phytopath. 29:463. Autoecious rust
Polyporus abietinus Dicks. ex Fr.—Sapwood rot (PDI) Overholts 1953
Poria tsugina (Murr.) Sacc. & Trott—White spongy rot (Mycologia
65:197) Lowe 1966
Pucciniastrum hydrangae (Magn.) Arth.—Needle rust (OS)

PIPERACEAE

Peperomia sp.

FUNGI

Rhizoctonia solani Kuehn—Root rot (C)

Peperomia caperata Yunck. Emerald ripple peperomia

FUNGI

Phytophthora parasitica Dast.—Leaf and crown rot (CWE; Phytopath. 58:718)

NEMATODES

Aphelenchoides fragariae (Ritzema-Bos) Christie—Leaf nematode (RMR)

P. obtusifolia (L.) A. Dietr. American rubber peperomia

FUNGI

Phytophthora parasitica Dast.—Leaf and crown rot (Phytopath. 58:718)

NEMATODES

Aphelenchoides fragariae (Ritzema Bos) Christie—Leaf nematode (RMR)

PLANTAGINACEAE

Plantago lanceolata L. Buckhorn plantain

FUNGI

Peronospora alta Fckl.—Downy mildew (CWE) Mycologia 41:323; CMI 683
Sclerotinia trifoliorum Eriks.—Root and stem rot (PDI)
Septoria inconspicua Berk. & Br.—Leaf spot (OS)

P. major L. Common plantain

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (MU)
Peronospora alta Fckl.—Downy mildew (OS) Mycologia 41:323; CMI 683
Ramularia plantaginis Ell. & G. Martin—Leaf spot (OS)
Sphaceloma plantaginis Jenkins & Bitanc.—Spot anthracnose (Plant Dis. Rptr. 31:162)

P. rugelii Dcne. Rugel's plantain

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)
Mycosphaerella columbi Rehm—Leaf spot (OS)
Peronospora alta Fckl.—Downy mildew (OS) Mycologia 41:323
Ramularia plantaginis Ell. & G. Martin—Leaf spot (Rpt. Geol. Survey Ohio 1893)
Rhizoctonia solani Kuehn—Foliar blight (CWE)
Sphaceloma plantaginis Jenkins & Bitanc.—Spot anthracnose (Plant Dis. Rptr. 31:162)

SLIME MOLDS

Physarum cinereum (Batsch) Pers.—Gray slime mold on leaves (CWE)
Not a pathogen. Martin & Alexopoulos 1969

PLATANACEAE

Platanus sp.

FUNGI

Phloeospora sp.—Leaf spot (CWE) The host was labeled in the nursery as *P. orientalis*

P. x acerifolia (Ait.) Willd. Planetree

FUNGI

Apiognomonium veneta (Sacc. & Speg.) v. Hohnel [*Gnomonia platani* Kleb.; Imp. St. *Discula platani* (Pk.) Sacc., *Gloeosporium platani* Oud.]—Anthracnose leaf blight and stem canker (OS, C) Mycologia 57:834; Arx 1970; Barr 1978; Sutton 1980
Ceratocystis fimbriata Ell. & Halst. f. sp. *platani* Walter (*Endocnidophora* f.)—Canker (PDI) Upadhyay 1981
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

ABIOTIC

Moisture stress; other environmental stresses—Leaf scorch and early leaf drop (CWE)

P. occidentalis L. Sycamore

FUNGI

Apiognomonium veneta (Sacc. & Speg.) v. Hohnel (*Gnomonia platani* Kleb.)—Anthracnose leaf blight, twig blight and canker (OS, C) See *P. x acerifolia*
Cytospora sp.—On branches (C)
Microsphaera penicillata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)
Phyllosticta sp.—Leaf spot (ODA) Possibly a conidial or spermatial stage of *Mycosphaerella*.

PLUMBAGINACEAE

Limonium sinuatum (L.) Mill. Statice

FUNGI

Cercospora insulana Sacc.—Leaf spot (C, NJT)

POLEMONIACEAE

Phlox divaricata L. Wild blue phlox

FUNGI

Cercospora omphacodes Ell. & Holw.—Leaf spot (OS)
Erysiphe cichoracearum DC.—Powdery mildew (Ohio J. Sci. 66:570)
Septoria divaricata Ell. & Ev.—Leaf spot (OS) Grove 1935

P. drummondii Hook. Annual phlox

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE)

P. maculata L. Meadow phlox

FUNGI

Septoria sp.—Leaf spot (OS)

P. paniculata L. Perennial phlox

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)
Sclerotium rolfsii Sacc. (Perf. St. *Athelia*)—Stem and crown rot (PDI) N. Car. Agr. Exp. Sta. Tech. Bull. 174
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (PDI)

NEMATODES

Ditylenchus dipsaci (Kuehn) Filip.—Leaf and stem nematode (PDI)
Meloidogyne sp.—Root knot (PDI)

ABIOTIC

Physiological—Leaf blight and drying (CWE)

***P. subulata* L. Moss-pink**

NEMATODES

Ditylenchus dipsaci (Kuehn) Filip.—Stem nematode (RMR)

***Polemonium reptans* L. Jacobs-ladder, Greek valerian**

FUNGI

Oidium sp.—Powdery mildew (CWE; Ohio J. Sci. 66:570)

Puccinia polemonii Diet. & Holw.—Rust (CWE, OS)

Septoria polemonii Thum.—Leaf spot (CWE)

POLYGALACEAE

***Polygala senega* L. Seneca snakeroot**

FUNGI

Puccinia andropoginis Schw.—Rust (OS)

POLYGONACEAE

***Fagopyrum esculentum* Moench Buckwheat**

FUNGI

Ramularia rufomaculans Pk.—Leaf spot (Ohio Agr. Exp. Sta. Bull. 214) CMI 856

***Polygonum amphibium* L. Willow-weed (May not be this species)**

FUNGI

Puccinia polygoni-amphibii Pers.—Rust (OS)

***P. aviculare* L. Knotweed, doorweed**

FUNGI

Cercospora avicularis Wint.—Leaf spot (OS)

Erysiphe polygoni DC.—Powdery mildew (OS)

Rhizoctonia solani Kuehn—Leaf blight (CWE)

Uromyces polygoni-avicularis (Pers.) Karst.—Rust (OS)

***P. coccineum* Muhl. Water smartweed**

FUNGI

Puccinia polygoni-amphibii Pers.—Rust (OS)

***P. convolvulus* L. Black bindweed**

FUNGI

Cercospora polygonacea Ell.—Leaf spot (OS)

Peronospora polygoni Thuem. ex Fischer—Downy mildew (OS)

Puccinia polygoni-amphibii Pers.—Rust (OS)

Septoria polygonorum Desm.—Leaf spot (OS) Grove 1935

***P. cristatum* Englm. & Gray Crested false buckwheat**

FUNGI

Peronospora polygoni Thuem. ex Fischer—Downy mildew (PDI)

***P. dumentorum* L. Hedge buckwheat**

FUNGI

Peronospora polygoni Thuem. ex Fischer—Downy mildew (PDI)

***P. erectum* L. Knotweed**

FUNGI

Erysiphe polygoni DC.—Powdery mildew (OS)

Uromyces polygoni-avicularis (Pers.) Karst.—Rust (OS)

***P. hydropiperoides* Michx. Mild water pepper**

FUNGI

Cercospora polygonorum Cooke—Leaf spot (OS)

Melanopsichium pennsylvanicum Hirschh.—Inflorescence smut (OS)

Septoria polygonorum Desm.—Leaf spot (OS) Grove 1935

***P. lapathifolium* L. Dock-leaved Persicaria**

FUNGI

Melanopsichium pennsylvanicum Hirschh.—Inflorescence smut (PDI)

Puccinia polygoni-amphibii Pers.—Rust (OS)

Septoria polygonorum Desm.—Leaf spot (Ohio Nat. 14:35) Grove 1935

***P. orientale* L. Princess-feather**

FUNGI

Septoria polygonorum Desm.—Leaf spot (OS) Grove 1935

***P. pennsylvanicum* L.**

FUNGI

Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis, OSU 1977)

Septoria polygonorum Desm.—Leaf spot (OS) Grove 1935

Ustilago utriculosa (Nees) Ung.—Seed smut (OS)

***P. persicaria* L. Lady's thumb**

FUNGI

Rhizoctonia solani Kuehn—From roots (Roberts, M.Sc. Thesis, OSU 1977)

Septoria polygonorum Desm.—Leaf spot (OS)

***P. punctatum* Ell.**

FUNGI

Cercospora polygonorum Cke.—Leaf spot (OS)

Puccinia polygoni-amphibii Pers.—Rust (OS)

Uromyces polygoni-avicularis (Pers.) Karst.—Rust (Plant Dis. Rptr. 25:196)

Ustilago utriculosa (Nees) Ung.—Seed smut (Ibid.)

***P. ramosissimum* Michx. Bushy knotweed**

FUNGI

Uromyces polygoni-avicularis (Pers.) Karst.—Rust (PDI)

***P. sagittatum* L. Arrowleaf tearthumb**

FUNGI

Sphacelotheca hydropiperis (Schum.) dBy.—Seed smut (OS)

***P. scandens* L. Climbing false buckwheat**

FUNGI

Erysiphe polygoni DC.—Powdery mildew (CWE)

Peronospora polygoni Thuem. ex Fischer—Downy mildew (OS)

Puccinia polygoni-amphibii Pers.—Rust (OS)

Ustilago anomala J. Kunze—Floral smut (CWE)

***Rheum rhaponticum* L. Garden rhubarb**

BACTERIA

Agrobacterium tumefaciens (Smith & Towns.) Conn—Crown gall (C)

Erwinia carotovora (Jones) Holland—Soft rot (USDA Bull. 1366)

FUNGI

Ascochyta rhei Ell. & Ev.—Leaf spot (OS) Walker 1952

Phyllosticta straminella Bres. (Plant Dis. Rptr. Sup. 90) (Probably *Ascochyta rhei*)

Phytophthora sp.—Root and crown rot (Plant Dis. Rptr. Sup. 90) J. Agr. Res. 23:1-26

Rhizoctonia solani Kuehn—Root rot (C)

Rumex altissimus Wood Tall dock

FUNGI

Septoria rumicis Trail—Leaf spot (CWE)

Ustilago parlatorei Fisch. v. Waldh.—Foliar smut (Ohio J. Sci. 59:313; CWE)

R. crispus L. Curled dock

FUNGI

Erysiphe polygoni DC.—Powdery mildew (CWE)

Ramularia rubella (Bon.) Nannf. [*Ovularia obliqua* (Cke.) Oud.]—Leaf spot (OS) Can. J. Bot. 35:203; Ellis & Ellis 1985; CMI 851

R. obtusifolius L. Broadleaf dock

FUNGI

Gloeosporium rumicis Ell. & Ev.—Leaf spot (OS) Needs to be verified. See Arx 1970.

Ramularia circumfusa Ell. & Ev.—Leaf spot (Proc. Acad. Nat. Sci., Philadelphia, p. 437, 1895)=? *R. rubella* (Bon.) Nannf. CMI 851

Tovara virginiana (L.) Raf. Virginia knotweed

FUNGI

Puccinia polygoni-amphibii Pers.—Rust (OS)

POLYPODIACEAE

Asplenium nidus L. Bird's-nest fern

BACTERIA

Pseudomonas asplenii (Ark & Thompk.) Savulescu—Bacterial leaf blight (C) Phytopath. 36:758-761, but see Plant Disease 68:344

NEMATODES

Aphelenchoides fragariae (Ritzema-Bos) Christie—Leaf nematode (RMR)

Cystopteris fragilis (L.) Bernh. Fragile fern

FUNGI

Hyalopsora polypodii (Diet.) Magn.—Rust (Arthur 1934)

Dryopteris sp. Shield fern

FUNGI

Ceratobasidium anceps (Bres. & Syd.) Jackson (Imp. St. *Sclerotium deciduum* J.J. Davis)—Leaf blight (CWE, OS) Iowa Studies Nat. Hist. 19:11, 1952; Can. J. Res. Sect. C. 27:241

Nephrolepis exaltata (L.) Schott Boston fern

FUNGI

Glomerella ?cingulata (Stonem.) Spauld. & Schrenk—Tip blight (PDI)

Onoclea sensibilis L. Sensitive fern

FUNGI

Uredinopsis mirabilis (Pk.) Magn.—Rust (OS)

Polystichum acrostichoides (Michx.) Schott Christmas fern

FUNGI

Taphrina polystichi Mix—Leaf blister (CWE) Mix 1949

PORTULACACEAE

Claytonia virginica L. Spring beauty

FUNGI

Physoderma claytoniana H.C. Greene—Leaf gall (CWE) Confirmed by Karling; Karling 1977

Puccinia mariae-wilsoni G.W. Clint.—Rust (OS)

Portulaca grandiflora Hook Rose-moss

FUNGI

Pythium sp.—Damping-off (Stephens, M.Sc. Thesis, OSU 1976)

Rhizoctonia solani Kuehn—Damping-off (Phytopath. 66:700)

P. oleracea L. Common purslane

FUNGI

Albugo quadrata (Wallr.) S.D. Baker [*A. portulacae* (DC.) Kuntze]—White blister (OS, CWE)

Rhizoctonia solani Kuehn—Root rot (Roberts, M.Sc. Thesis, OSU 1977)

PRIMULACEAE

Cyclamen persicum Mill. Florist's cyclamen

BACTERIA

Erwinia carotovora (L.R. Jones) Holland—Hypocotyl rot (Ohio J. Sci. 58:147)

FUNGI

Botrytis cinerea Pers.—Gray mold blight (CWE) Coley-Smith et al. 1980
Fusarium sp.—Wilt, tuber rot (PDI, C)

Glomerella cingulata (Stonem.) Spauld. & Schrenk [Sometimes reported as *Gloeosporium cyclaminis* Sibilis, which according to Arx (1970), is a synonym of *Cryptocline cyclaminis* (Sibilis) Arx]—Leaf, stalk, and bud blight (PDI) Arx 1970; Mycologia 46:52

Phyllosticta cyclaminicola Trel.—Leaf spot (PDI)

Ramularia cyclaminicola Trel. (*Gladosporium cyclaminis* Massey & Tilford)—Stunt (Phytopath. 22:19 and 40:1027)

Rhizoctonia solani Kuehn—Root rot (HJH; Plant Dis. 72:751)

VIRUSES, VIROIDS, MYCOPLASMAS

Tomato spotted wilt virus (TSWV)—Spotted wilt; various symptoms (STN) CMI/AAB No. 39

Lysimachia sp. Loosestrife

FUNGI

Ceratobasidium anceps (Bres. & Syd.) Jacks. (Imp. St. *Sclerotium deciduum* J.J. Davis)—Stem and leaf necrosis (CWE) Iowa Studies Nat. Hist. 19:11; Can. J. Res. Sect. C 27:241)

L. ciliata L. Fringed loosestrife

FUNGI

Ceratobasidium anceps (Bres. & Syd.) Jackson—Stem and leaf necrosis (CWE) Ibid.

Puccinia dayi G.W. Clint.—Rust (CWE, OS)

Septoria conspicua Ell. & G. Martin—Leaf spot (OS)

L. nummularia L. Moneywort

FUNGI

Septoria conspicua Ell. & G. Martin (OS)

L. punctata L. Garden loosestrife

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

L. quadrifolia L.

FUNGI

Coleosporium campanulae Lev. ex Kickx—Rust (CWE)

Septoria conspicua Ell. & G. Martin—Leaf spot (CWE)

Primula sp. Primrose

FUNGI

Botrytis cinerea Pers.—Gray-mold blight (Plant Dis. Rptr. Sup. 50)

PYROLACEAE

***Chimaphila maculata* (L.) Pursh Spotted winter-green, pipsissewa**

FUNGI

Pucciniastrum pyrolae Diet. ex Arthur—Rust (OS)

***Pyrola elliptica* Nutt. Wintergreen**

FUNGI

Chrysomyxa pirolata Wint.—Rust (OS)

***P. rotundifolia* L. Wintergreen**

FUNGI

Chrysomyxa pirolata Wint.—Rust (OS)

RANUNCULACEAE

***Actaea pachypoda* Eil. White baneberry**

FUNGI

Puccinia recondita Rob. ex Desm.—Rust (OS)

Urocystis carcinodes (Berk. & Curt.) Fisch. v. Waldh.—Leaf and stem smut (OS)

***Anemone canadensis* L. Meadow anemone**

FUNGI

Plasmopara pygmaea (Unger) Schroet.—Downy mildew (OS)

Ramularia didyma Unger—Leaf spot (Ohio Nat. 13:35) Ellis & Ellis 1985

***A. japonica* (Thunb.) Siebold & Zucc. (Probably**

***A. x hybrida* Paxt.) Japanese anemone**

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Phytopath. 52:684)

***A. nemerosa* L. European wood anemone**

FUNGI

Tranzschelia anemones (Pers.) Nannf.—Rust (Plant Dis. Rptr. Sup. 37)

***A. pulsatilla* L. Pasque-flower**

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

***A. quinquefolia* L. Wood anemone, wind-flower**

FUNGI

Plasmopara pygmaea (Unger) Schoet.—Downy mildew (CWE; Ohio J. Sci. 70:218)

Synchytrium anemones (DC. ex Fr.) Wor.—Leaf gall (CWE) Karling 1964

Tranzschelia anemones (Pers.) Nannf.—Rust (OS)

Urocystis anemones (Pers.) Wint.—Leaf smut (CWE; OS)

***A. sylvestris* L.**

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

***A. virginiana* L. Thimbleweed**

FUNGI

Erysiphe polygoni DC.—Powdery mildew (CINC)

Puccinia anemones-virginianae Schw.—Rust (OS)

***Anemonella thalictroides* (L.) Spach Rue-anemone**

FUNGI

Erysiphe polygoni DC.—Powdery mildew (CWE; Ohio J. Sci. 66:570)

***Aquilegia* sp. (Cultivated) Columbine**

FUNGI

Erysiphe polygoni DC.—Powdery mildew (CWE)

Sclerotinia sclerotiorum (Lib.) dBy.—Crown and stem rot (Plant Dis. Rptr. Sup. 86) Mycotaxon 9:365

***A. canadensis* L. Wild columbine**

FUNGI

Erysiphe polygoni DC.—Powdery mildew (OS)

Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot (PDI) Mycotaxon 9:365

Septoria aquilegiae Penz. & Sacc.—Leaf spot (OS)

***A. vulgaris* L. Garden columbine**

FUNGI

Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot (PDI) Mycotaxon 9:365

Septoria aquilegiae Penz. & Sacc. (? *Septoria aquilegiae* Ell. & Kell.)—Leaf spot (PDI)

***Caltha palustris* L. Marsh marigold**

FUNGI

Erysiphe polygoni DC.—Powdery mildew (OS)

***Cimicifuga racemosa* (L.) Nutt. Black cohosh**

FUNGI

Puccinia recondita Rob. ex Desm.—Rust (OS)

Urocystis carcinodes (Berk. & Curt.) Fisch. v. Waldh.—Stem and leaf smut (Fischer 1953) Host may be *Actaea*, not *Cimicifuga*

***Clematis* sp. Clematis**

BACTERIA

Agrobacterium tumefaciens (Sm. & Towns.) Conn—Crown gall (ODA)

FUNGI

Ascochyta clematidina Thuem. emend. Gloyer—Leaf spot and stem rot (PDI) J. Agr. Res. 4:331

***C. heracleifolia* DC.**

***C. integrifolia* L.**

***C. montana* Buch.-Ham. ex DC.**

***C. recta* L.**

NEMATODES

Meloidogyne hapla Chitwood—Root knot on above four species (Baringer 1930-34)

***C. virginiana* L. Virgin's bower**

FUNGI

Erysiphe polygoni DC.—Powdery mildew (OS)

Puccinia recondita Rob. ex Desm.—Rust (OS)

Septoria clematidis Rob. ex Desm.—Leaf spot (Mycologia 65:192)

NEMATODES

Meloidogyne sp.—Root knot (PDI)

***Delphinium* spp. Larkspur**

BACTERIA

Erwinia atroseptica (v. Hall) Jennison—Bud and stem blight (CWE)

Pseudomonas syringae pv. *delphinii* (E.F. Smith) Yount et al.—Bacterial leaf blight (OS) J. Agr. Res. 28:261

FUNGI

Erysiphe polygoni DC.—Powdery mildew (Ohio J. Sci. 66:570)

Sclerotinia sclerotiorum (Lib.) dBy.—Crown and stem rot (PDI) Mycotaxon 9:365

Sclerotium rolfsii Sacc. [Perf. St. *Pellicularia rolfsii* (Sacc.) E. West; *Athelia rolfsii* (Curzi) Tu & Kimbrough] —Southern blight (OS) N. Car. Agr. Exp. Sta. Tech. Bull. 174; CMI 410

**D. ajacis L. [*Consolida ambigua* (L.) Ball & Heyw.]
Rocket larkspur**

FUNGI

Diaporthe arctii (Lasch) Nits.—Stem canker (OS) Wehmeyer 1933;
Phytopath. 21:77

D. x cultorum Voss Garden larkspur

FUNGI

Fusarium sp.—Wilt (PDI)
Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot (PDI) Mycotaxon 9:365

Hepatica americana (DC.) Ker Liverleaf, hepatica

H. acutiloba DC.—Liverleaf

FUNGI

Tranzschelia discolor (Fckl.) Tranz. & Litv.—Rust (OS)
Urocystis anemones (Pers.) Wint.—Leaf smut (OS)

Hydrastis canadensis L. Goldenseal

FUNGI

Alternaria sp.—Leaf blight (PDI)
Botrytis cinerea Pers.—Gray mold blight (USDA Farmers Bull. 613)
Fusarium sp.—Wilt (USDA Plant Dis. Bull. Sup. 29)

NEMATODES

Meloidogyne sp.—Root knot (PDI)

**Isopyrum bternatum (Raf.) T. & G. False rue-
anemone**

FUNGI

Cercospora aquilegiae Kell. & Sw.—Leaf spot (CWE) Confirmed by
Chupp

Paeonia spp. Peony

FUNGI

Botrytis cinerea Pers.—Bud rot, blossom blight, stem rot (CWE)
Cercospora variicolor Wint.—Leaf spot (OS)
Cladosporium paeoniae Pass.—Leaf blotch (OS, CWE)
Phytophthora cactorum (Leb. & Cohn) Schroet.—Crown rot (PDI, AFS)
Sclerotinia sclerotiorum (Lib.) dBy.—Stem and crown rot (PDI)
Mycotaxon 9:365-444
Verticillium albo-atrum Reinke & Berth.—Wilt (C, PDI) CMI 255, 256

NEMATODES

Meloidogyne sp.—Root knot (PDI)

VIRUSES, VIROIDS, MYCOPLASMAS

Virus—Ringspot symptoms; reported to be caused by a virus (CWE)

ABIOTIC

Physiological, deep planting—Bud blast (C)

Ranunculus sp. Buttercup

FUNGI

Entyloma microsporum (Ung.) Schroet.—Leaf smut (CWE)

R. abortivus L. Kidney-leaf crowfoot

FUNGI

Erysiphe polygoni DC.—Powdery mildew (OS)
Peronospora ficariae Tul.—Downy mildew (CWE, OS)
Puccinia eatoniae Arth.—Rust (CWE)

R. acris L. Meadow buttercup

FUNGI

Erysiphe polygoni DC.—Powdery mildew (OS)

R. hispidus Michx. Hispid buttercup

FUNGI

Ramularia aequivoca (Ces.) Sacc.—Leaf spot (CWE) Ellis & Ellis 1985

R. pennsylvanicus L. Bristly buttercup

FUNGI

Ramularia didyma Unger—Leaf spot (Ohio Nat. 13:35) Ellis & Ellis
1985

R. recurvatus Poir. Hooked crowfoot

FUNGI

Erysiphe polygoni DC.—Powdery mildew (OS; Ohio J. Sci. 66:570)
Peronospora ficariae Tul.—Downy mildew (CWE; Ohio J. Sci. 70:218)
Ramularia didyma Unger—Leaf spot (Rpt. Geol. Survey Ohio, Vol.
7, 1893)
R. ranunculi Pk.—Leaf spot (6th Ann. Rpt. Ohio Acad. Sci.)

R. septentrionalis Poir. Swamp buttercup

FUNGI

Peronospora ficariae Tul.—Downy mildew (OS; Ohio J. Sci. 70:218)

Thalictrum sp. Meadowrue

FUNGI

Phytophthora infestans (Mont.) dBy. f.sp. *thalictri* (Wilson & Davis)
Waterhouse—Downy mildew (CWE, OS) Waterhouse 1970

T. aquilegifolium L.

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

T. dasycarpum Fisch. & Lall. Purple meadowrue

FUNGI

Erysiphe polygoni DC.—Powdery mildew (Ohio J. Sci. 66:570)
Tranzschelia discolor (Fckl.) Tranz. & Litv. (*T. pruni-spinosae* (Pers.)
Diet.—Rust (OS) CMI 287, 288

T. dioicum L. Early meadowrue

FUNGI

Tranzschelia discolor (Fckl.) Tranz. & Litv.—Rust (OS)
T. thalictri (Chev.) Diet.—Rust (OS)

T. polygamum Muhl. Tall meadowrue

FUNGI

Erysiphe polygoni DC.—Powdery mildew (CWE)
Tranzschelia discolor (Fckl.) Tranz. & Litv. (*T. pruni-spinosae* (Pers.)
Diet.)—Rust (OS) CMI 287, 288

T. speciosissimum L.

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

RHAMNACEAE

Rhamnus alnifolia L'Her Alder-leaved buckthorn

FUNGI

Puccinia coronata Cda.—Rust (OS)

R. cathartica L. European buckthorn

FUNGI

Puccinia coronata Cda.—Rust (OS, CWE)

R. frangula L. Glossy buckthorn

NEMATODES

Pratylenchus penetrans (Cobb) Filip. & Stekh.—Lesion nematode
(RMR)
Xiphinema americanum Cobb—Dagger nematode (RMR)

R. lanceolata Pursh Lance-leaf buckthorn

FUNGI

Puccinia coronata Cda.—Rust (OS)

ROSACEAE

Agrimonia sp.

FUNGI

Septoria agrimoniae Roum.—Leaf spot (OS)

Agrimonia gyrosepala Wallr.

FUNGI

Pucciniastrum agrimoniae (Diet.) Tranz.—Rust (OS)

A. parviflora Ait.

FUNGI

Pucciniastrum agrimoniae (Diet.) Tranz.—Rust (OS)

Sphaerotheca macularis (Wallr.) Lind —Powdery mildew (OS; Ohio J. Sci. 66:570)

A. pubescens Wallr.

FUNGI

Pucciniastrum agrimoniae (Diet.) Tranz.—Rust (OS)

A. striata Michx.

FUNGI

Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (OC)

Amelanchier sp.

FUNGI

Monilinia fructicola (Wint.) Honey—Brown rot (Plant Dis. Rptr. Sup. 1)

A. arborea (Michx.) Fern. Serviceberry, shadbush

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight (OS) USDA Agr. Handbook 510

FUNGI

Apiosporina collinsii (Schw.) Hoen.-Witches'-broom (OS) Fungi Canadenses No. 76; Can. J. Bot 46:799

Gymnosporangium biseptatum Ellis—Rust (OS) Kern 1973. May not be this species

G. clavariiforme (Pers.) DC.—Leaf and fruit rust (OS, PDI) Kern 1973

G. corniculans Kern—Leaf rust (OS) Ibid.

G. nidus-avis Thaxt.—Leaf, fruit, and stem rust (OS) Ibid.

Nummularia discinola (Schw.) Cke. [*N. discreta* (Schw.) Tul.]—Blister canker (PDI) Mycologia 63:682. See Trans. Brit. Mycol. Soc. 85:385 for recent taxonomy.

Podosphaera clandestina (Wallr.) Lev.—Powdery mildew (CWE)

Aronia sp. Chokeberry

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight (C) USDA Agr. Handbook 510

FUNGI

Phyllosticta sp.—Leaf spot (C)

Chaenomeles speciosa (Sweet) Nakai Flowering quince

BACTERIA

Agrobacterium tumefaciens (E.F. Sm. & Towns.) Conn—Crown gall (ODA)

FUNGI

Gymnosporangium clavipes Cke. & Pk.—Fruit rust (C, CWE) Kern 1973; CMI 543

Cotoneaster spp. Cotoneaster

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight (In Ohio on some species, especially *C. divaricatus* Rehd. & E.H. Wils. (C) USDA Agr. Handbook 510

FUNGI

Phytophthora cinnamomi Rands—Root rot (ODA) On *C. apiculata*. APS Monograph No. 10

Sphaeropsis malorum Pk. [Perf. St. *Botryosphaeria obtusa* (Schw.) Shoemaker, *B. quercuum* (Schw.) Sacc., *Phyalospora obtusa* Cke.]—Canker, twig blight (PDI) Barr 1972

Crataegus sp. Hawthorn

FUNGI

Septoria crataegi Kickx—Leaf spot (OS)

Venturia inaequalis (Cke.) Wint.—Scab (C)

Xylaria hypoxylon L. ex Grev.—On dead wood, ? root rot (PDI)

C. calopendron (J.F. Ehrh.) Medic.

FUNGI

Gymnosporangium globosum Farl.— Leaf rust (Arthur 1934) Kern 1973; CMI 546

Podosphaera clandestina (Wallr.) Lev.—Powdery mildew (Ann. Rpt. Ohio Acad. Sci. 5:67)

C. crus-galli L. Cockspur hawthorn

FUNGI

Gymnosporangium clavipes Cke. & Pk.—Fruit and stem rust (OS) Kern 1973; Fungi Canadenses No. 116

G. globosum Farl.—Leaf rust (Arthur 1934) Kern 1973; CMI 546

Oidium sp.—Powdery mildew (Ohio J. Sci. 66:570)

Podosphaera clandestina (Wallr.) Lev.—Powdery mildew (Ann. Rpt. Ohio Acad. Sci. 5:67)

C. intricata J. Lange

FUNGI

Gymnosporangium sp.—Rust (ODA; Secrest Arboretum)

C. laevigata (Poir.) DC. English hawthorn

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight (CWE) USDA Agr. Handbook 510

FUNGI

Entomosporium mespili (DC. ex Duby) Sacc. [Perf. St. *Diplocarpon mespili* (Sorauer) Sutton]—Leaf blight (OS, C, CWE) Sutton 1980; Funk 1985

Gymnosporangium clavipes Cke. & Pk.—Fruit rust (CWE) Kern 1973; Fungi Canadenses No. 116; CMI 543

Podosphaera clandestina (Wallr.) Lev.—Powdery mildew (OS; Ohio J. Sci. 66:570)

C. x lavalleyi Herincq. Lavalley hawthorn

FUNGI

Gymnosporangium clavipes Cke. & Pk.—Fruit and stem rust (ODA, CWE) Kern 1973

C. mollis (Torr. & Gray) Scheele

FUNGI

Gymnosporangium globosum Farl.—Leaf rust (OS) Ibid.

C. monogyna Jacq. Single-seeded hawthorn

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight (Secrest Arboretum, OARDC) USDA Agr. Handbook 510

C. nitida (Englm.) Sarg.

FUNGI

Gymnosporangium sp.—Rust (ODA)

C. phaenopyrum (L.f.) Medic. Washington hawthorn

FUNGI

Gymnosporangium clavipes Cke. & Pk.—Fruit and stem rust (CWE, C, OS) Kern 1973; Fungi Canadenses No. 116

C. pinnatifida Bunge Chinese hawthorn

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight (Secrest Arboretum, OARDC)

C. pruinosa (H.L. Wendl.) Koch

FUNGI

Gymnosporangium globosum Farl.—Leaf rust (North Amer. Flora 7:206) Kern 1973; CMI 546

C. punctata Jacq.

FUNGI

Gymnosporangium globosum Farl.—Leaf rust (OS) Ibid.

C. succulenta Lk.

FUNGI

Gymnosporangium clavipes Cke. & Pk.—Fruit rust (OS) Kern 1973; Fungi Canadenses No. 116; CMI 543
Phyllactinia guttata (Wallr.) Lev.—Powdery mildew (OS)

C. viridis L.

FUNGI

Gymnosporangium clavipes Cke. & Pk.—Fruit rust (CWE, ODA) Kern 1973; CMI 543

Cydonia oblonga Mill. Quince

BACTERIA

Agrobacterium tumefaciens (E.F. Smith & Townsend) Conn—Crown gall (USDA Bull. 1366)
Erwinia amylovora (Burr.) Winslow et al.—Fire blight (OS) USDA Agr. Hdbk. 510

FUNGI

Botryosphaeria obtusa (Schw.) Shoem. (Imp. St. *Sphaeropsis malorum* Pk.)—Black rot and canker (Plant Dis. Rptr. Sup. 14) See *Sphaeropsis* under *Cotoneaster*
Entomosporium mespili (DC.) Sacc. [*E. maculatum* Lev.; Perf. St. *Diplocarpon mespili* (Sorauer) Sutton]—Leaf blight (OS) Sutton 1980
Glomerella cingulata (Stonem.) Spauld. & Schrenk (Imp. St. *Colletotrichum gloeosporioides* (Penz.) Sacc.—Bitter rot (CWE) Mycologia 46:52
Gymnosporangium clavipes Cke. & Pk.—Fruit rust (CWE) Kern 1973; CMI 543
Monilinia fruticola (Wint.) Honey—Brown rot (CWE) Byrde & Willetts 1977
Mycosphaerella pomi (Pass.) Lindau (Imp. St. *Phoma pomi* Pass.)—Fruit spot (PDI) Anderson 1956
Podosphaera clandestina (Wallr.) Lev.—Powdery mildew (MU)

Duchesnea indica (Andr.) Focke Indian strawberry

FUNGI

Frommeella duchesneae (Arth.) Yohem, Cumm., & Gilbn. [*Frommea obtusa* (Strauss) Arth.]—Rust (CWE) Cummins and Hiratsuka 1983
Peronospora potentillae dBy.—Downy mildew (CWE)

NEMATODES

Aphelenchoides sp.—Foliar nematode (PK, ODA)

Filapendula rubra (Hill) Robins Queen-of-the-prairie

FUNGI

Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (OS, CWE)

Fragaria x ananassa Duchesne Strawberry. General reference Compendium of Strawberry Diseases. 1984. American Phytopathological Society.

BACTERIA

Xanthomonas fragariae Kennedy & King—Angular leaf spot (MAE) CMI 558

FUNGI

Botrytis cinerea Pers. [Perf. St. *Botryotinia fuckeliana* (dBy.) Whetzel]—Gray mold fruit rot (MAE)
Colletotrichum acutatum Simmons—Fruit rot (Phytopath. 77:1752) Arx 1970
C. gloeosporioides (Penz.) Sacc. [Perf. St. *Glomerella cingulata* (Stonem.) Spauld. & Schrenck]—Fruit rot (MAE; Plant Dis. 70:475) Arx 1970
Fusarium sp.—Associated with root rot (Ibid.)
Hainesia lythri (Desm.) Hoehn. [Perf. St. *Pezizella oenotherae* (Cke. & Ell.) Sacc.; *Discohainesia o.* (Cke. & Ell.) Nannf.]—Tan or brown rot (USDA Agr. Handbook 189) Sutton 1980
Marssonina fragariae (Lib.) Kleb. [Perf. St. *Diplocarpon earlianum* (Ell. & Ev.) Wolf]—Leaf scorch (OS) Can. J. Bot. 29:299; CMI 486
Phomopsis obscurans (Ell. & Ev.) Sutton [*Dendrophoma o.* (Ell. & Ev.) H.W. Anders.]—Leaf blight (OS) Sutton 1980; Can. J. Bot. 29:299; CMI 227
Phytophthora cactorum (Leb. & Cohn) Schroet.—Leather rot of fruit (MAE) Plant Dis. 67:549
P. fragariae Hickm.—Red stele (MAE, C)
Pythium sp.—Root rot (C)
Ramularia tulasnei Sacc. [Perf. St. *Mycosphaerella fragariae* (Tul.) Lindau]—Leaf spot (OS) Phytopath. 31:225; CMI 708
Rhizoctonia solani Kuehn—Associated with black root (Norton, Ph.D. Dissertat. OSU 1950)
Rhizopus stolonifer (Ehr. ex Fr.) Vuill.—Soft rot of fruit (CWE)
Sclerotinia sclerotiorum (Lib.) dBy.—Crown rot (PDI) Mycotaxon 9:365
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (MAE)
Verticillium albo-atrum Reinke & Berth.—Wilt (MAE) CMI 255, 256

SLIME MOLDS

Physarum cinereum (Batsch) Pers.—Slime mold on plants (MAE, CWE) Martin and Alexopoulos 1969
Diachea leucopodia (Bull.) Rost.—Slime mold; not parasitic but can be troublesome (MAE) Ibid.

NEMATODES

Meloidogyne hapla Chitwood—Root knot (RMR)
Pratylenchus penetrans (Cobb) Filip. & Stekh.—Lesion nematode (RMR)
Xiphinema americanum Cobb—Dagger nematode (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Virus — Mosaic, crinkle, and mottle symptoms, but specific viruses or virus-like agents not identified.

F. vesca L.

FUNGI

Phomopsis obscurans (Ell. & Ev.) Sutton (*Dendrophoma obscurans* Anderson)—Leaf blight (CWE) Sutton 1980

Geum sp. Avens

FUNGI

Ceratobasidium anceps (Bres. & Syd.) Jacks. (Imp. St. *Sclerotium* sp.)—Leaf blight (CWE) Can. J. Res. Sect. C. 27:241

G. canadense Jacq. White avens

FUNGI

Peronospora potentillae dBy.—Downy mildew (CWE; Ohio J. Sci. 70:218)
Septoria gei Rob. & Desm.—Leaf spot (PDI)
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (OS)

G. quellyon Sweet (G. chilense) Geum

FUNGI

Peronospora potentillae dBy.—Downy mildew (CWE; Ohio J. Sci. 70:218)

G. laciniatum Murr.

FUNGI

Sphaerotheca macularis (Wallr.) Lind.—Powdery mildew (OS)

G. vernum (Raf.) T. & G. Spring avens

FUNGI

Sphaerotheca macularis (Wallr.) Lind.—Powdery mildew (OS)

G. virginianum L.

FUNGI

Sphaerotheca macularis (Wallr.) Lind.—Powdery mildew (OC)

Kerria japonica (L.) DC. Japanese rose, kerria

FUNGI

Coccomyces kerriae V.B. Stewart (*Blumeriella kerriae*; Imp. St. *Cylindrosporium kerriae* Stewart)—Leaf and twig blight (OS) Phytopath. 7:339; Ainsworth, Sparrow and Sussman 1973

Phomopsis japonica (Sacc.) Trav.—Twig blight (Plant Dis. Rptr. Sup. 90)

Malus species The records below on the species of flowering crabapples are from observations of the author of plantings in nurseries and arboreta, and from mimeographed and published reports of surveys by Powell (OSU), Nichols (Penn. St. Univ.), Smith (OSU), and Smith and Treaster (OSU). Some of the species, or cultivars within the species, are moderately to highly susceptible to the pathogens listed. Other species or cultivars are resistant with the listed pathogens in trace amounts. In the following lists if a source is not indicated the surveys referred to above are the source.

M. baccata (L.) Borkh. Siberian crabapple

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Bacterial fire blight (PDI)

FUNGI

Phyllosticta solitaria Ell. & Ev.—Leaf spot (PDI)

Podosphaera leucotricha (Ell. & Ev.) Salm.—Powdery mildew (CWE) Ohio J. Sci. 66:570

Venturia inaequalis (Cke.) Wint.—Scab (CWE)

M. coronaria (L.) Mill. Wild sweet crabapple

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Bacterial fire blight (CWE)

FUNGI

Gymnosporangium juniperi-virginianae Schw.—Leaf rust (CWE) Kern 1973; Fungi Canadenses No. 137

Sphaeropsis malorum Pk. (Perf. St. *Botryosphaeria*)—Leaf spot

Venturia inaequalis (Cke.) Wint.—Scab (CWE)

M. floribunda Sieb. ex VanHoutte Japanese flowering crabapple

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Bacterial fire blight (CWE)

FUNGI

Podosphaera leucotricha (Ell. & Ev.) Salm.—Powdery mildew (CWE)

Venturia inaequalis (Cke.) Wint.—Scab (CWE)

M. glaucescens Rehd.

FUNGI

Gymnosporangium sp.—Rust (CWE)

Venturia inaequalis (Cke.) Wint.—Scab (CWE)

M. halliana Koehne

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Bacterial fire blight

M. hupehensis (Pamp.) Rehd. Tea crabapple

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight

M. ioensis (A. Wood) Britt. Wild crabapple

FUNGI

Gymnosporangium juniperi-virginianae Schw.—Rust (CWE)

Sphaeropsis malorum Pk.—Leaf spot

Venturia inaequalis (Cke.) Wint.—Scab (CWE)

M. lancifolia (= ? M. coronaria (L.) Mill.)

FUNGI

Venturia inaequalis (Cke.) Wint.—Scab

M. prunifolia (Willd.) Borkh. Plum-leaved crabapple

FUNGI

Venturia inaequalis (Cke.) Wint.—Scab

M. pumila Mill.

FUNGI

Podosphaera sp.—Powdery mildew

Venturia inaequalis (Cke.) Wint.—Scab

M. x purpurea (Hort. Barbier) Rehd.

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight

FUNGI

Venturia inaequalis (Cke.) Wint.—Scab (CWE)

M. sargentii Rehd. Sargent crabapple

FUNGI

Venturia inaequalis (Cke.) Wint.—Scab

M. sieboldii (Regel) Rehd. Toringo crabapple

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight

FUNGI

Venturia inaequalis (Cke.) Wint.—Scab

M. soulardii (Bailey) Britt.

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight

FUNGI

Podosphaera leucotricha (Ell. & Ev.) Salm.—Powdery mildew

Venturia inaequalis (Cke.) Wint.—Scab

M. spectabilis (Ait.) Borkh. Chinese flowering crabapple

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight

FUNGI

Venturia inaequalis (Cke.) Wint.—Scab

***Malus sylvestris* Mill. (*Pyrus malus* L.) Apple**

BACTERIA

- Agrobacterium tumefaciens* (E.F. Smith & Towns.) Conn—Crown gall (OS)
Erwinia amylovora (Burr.) Winslow et al.—Fire blight (OS) USDA Agr. Hdbk. 510
Pseudomonas syringae pv. *papulans* (Rose) Dhanvantari—Blister spot of fruit (C) J. Agr. Res. 68:269-296.

FUNGI

- Alternaria* spp.—Moldy core (MAE)
Alternaria sp.—Fruit rot (CWE)
Armillaria mellea (Vahl ex Fr.) Kummer—Root rot (Selby 1910) Miller 1972
Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (*B. ribis* Gross. & Dug.) (Imp. St. *Dothiorella*)—Canker and fruit rot (OS, CWE) Barr 1972. See Arx 1987; Sutton 1980 and Mycotaxon 30:117
B. quercuum (Schw.) Sacc. [*B. obtusa* (Schw.) Shoemaker; (*Physalospora obtusa* Cke.); Imp. St. *Sphaeropsis malorum* Pk.]—Leaf spot, canker, and black rot of fruit (OS) Barr 1972; Anderson 1958
Botrytis cinerea Pers.—Blossom end fruit rot (MAE)
Clitocybe tabescens (Scop. ex Fr.) Bres. [*Armillaria t.* (Scop. ex Fr.) Sing.]—Root rot (Lutz, M.Sc. Thesis, OSU 1918) Miller 1972
Coniothyrium fuckelii Sacc. [Perf. St. *Leptosphaeria coniothyrium* (Fckl.) Sacc.]—Canker (C) CMI 663
Coryneum follicola Fckl.—From leaves (Selby 1910)
Cytospora spp.—Dieback; on twigs (PDI)
Ganoderma applanatum (Pers. ex Wallr.) Pat. (*Fomes*)—White mottled heart rot (PDI)
Gloeodes pomigena (Schw.) Colby—Sooty blotch (C, CWE) Va. Agr. Exp. Sta. Tech. Bull. 50
Glomerella cingulata (Ston.) Spauld. & Schrenk (Imp. St. *Colletotrichum gloeosporioides* Penz.)—Bitter rot and canker (OS, CWE) Arx 1970; Mycologia 46:52
Gymnosporangium clavipes Cke. & Pk.—Quince rust on fruit (OS) Kern 1973; Fungi Canadenses No. 116; CMI 543
G. globosum Farl.—Hawthorn rust on leaves (CWE) Kern 1973; CMI 546
G. juniperi-virginianae Schw.—Cedar-apple rust on leaves and fruit (OS) Kern 1973; Fungi Canadenses No. 137
Helminthosporium papulosum Berg—Black pox (OS) W. Va. Agr. Exp. Sta. Bull. 260
Monilinia fructicola (Wint.) Honey—Brown rot (CWE) Byrde & Willetts 1977
Mycosphaerella pomi (Pass.) Lindau (Imp. St. *Phoma pomi* Pass.)—Fruit spot (OS, CWE) OAES Month. Bull. 8:91
Nectria galligena Bres. (Imp. St. *Cylindrocarpon mali* (Allesch.) Wr.]—Canker (Plant Dis. Rptr. Sup. 1) CMI Mycol. Paper No. 73
Nummularia discreta (Schw.) Tul. (*N. discinola* (Schw.) Cke.)—Blister canker (OS) Mycologia 63:682; OAES Cir. 125. See Trans. Brit. Mycol. Soc. 85:385 for recent taxonomy.
Penicillium expansum Lk. ex Thom.—Blue mold fruit rot (CWE) CMI 97
Phomopsis mali Roberts—Rough bark disease (PDI) Phytopath. 2:263-264
Phyllosticta prunicola Sacc.—Scurfy bark (PDI)
P. solitaria Ell. & Ev.—Fruit blotch, leaf spot and canker (OS) Anderson 1956
Phytophthora cactorum (Leb. & Cohn) Schroet.—Collar rot (OS, MAE) OARDC Cir. 283
Podosphaera leucotricha (Ell. & Ev.) Salm.—Powdery mildew (OS)
P. clandestina (Wallr.) Lev.—Powdery mildew (OC)
Schizophyllum commune Fr.—Sapwood rot (PDI) Mycologia 53:574
Schizothyrium pomi (Fr. ex Mont.) Arx (*Microthyriella rubi*; Imp. St. *Zygophiala jamaicensis* Mason)—Fly-speck (CWE) Phytopath. 67:580
Sclerotinia sclerotiorum (Lib.) dBy.—Blossom end fruit rot (C) Mycotaxon 9:365
Trichothecium roseum Lk. ex Fr.—Pink rot (OS) Domsch et al. 1980
Venturia inaequalis (Cke.) Wint. (Imp. St. *Spilocaea pomi* Fr.)—Scab (OS)
Xylaria sp.—Root rot, decay (OS) Mycologia 78:391

NEMATODES

- Meloidogyne hapla* Chitwood—Root knot (RMR)
Pratylenchus penetrans (Cobb) Filip. & Stekhoven—Lesion nematode (RMR)

- P. vulnus* Allen & Jensen—Lesion nematode (RMR)
Xiphinema americanum Cobb—Dagger nematode (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

- Stem pitting virus—Stem pitting (MAE)

ABIOTIC

- Calcium deficiency—Bitter pit (Stippen) of fruit in storage (MAE) USDA Handbook 376
Calcium deficiency—Cork spot of fruit on tree (MAE) Ibid.
Frost injury—Band of russeted tissues encircling fruit (CWE)
Low pH and mineral nutrient imbalance—Internal bark necrosis and measles (CWE, OS)
Physiological disorder—Necrotic leaf blotch of Golden Delicious cv. (MAE)
Physiological disorder—Jonathan spot (CWE)

***M. toringoides* (Rehd.) Hughes Cutleaf crabapple**

BACTERIA

- Erwinia amylovora* (Burr.) Winslow et al.—Fire blight

FUNGI

- Venturia inaequalis* (Cke.) Wint.—Scab

***M. tschonoskii* (Maxim.) C.K. Schneid.**

BACTERIA

- Erwinia amylovora* (Burr.) Winslow et al.—Fire blight

FUNGI

- Podosphaera* sp.—Powdery mildew
Venturia inaequalis (Cke.) Wint.—Scab

***M. yunnanensis* (Franch.) C.K. Schneid.**

BACTERIA

- Erwinia amylovora* (Burr.) Winslow et al.—Fire blight

FUNGI

- Venturia inaequalis* (Cke.) Wint.—Scab

***M. x zumi* (Matsum.) Rehd.**

BACTERIA

- Erwinia amylovora* (Burr.) Winslow et al.—Fire blight

FUNGI

- Venturia inaequalis* (Cke.) Wint.—Scab

***Photinia villosa* (Thunb.) DC. Photinia**

BACTERIA

- Erwinia amylovora* (Burr.) Winslow et al.—Bacterial fire blight (CWE)

ABIOTIC

- Iron deficiency—Chlorosis (E.M. Smith, OARDC Res. Cir. 263)

***Physocarpus opulifolius* (L.) Maxim. Ninebark**

FUNGI

- Cercospora* ?*physocarpi* Ray—Leaf spot (CWE)

***Potentilla canadensis* L. Cinquefoil**

FUNGI

- Frommea obtusa* (Strauss) Arth.—Rust (OS) Probably *Phragmidium*
Phragmidium potentillae (Pers.) Karst.—Rust (OS)
Taphrina potentillae (Farl.) Johans.—Leaf blister (CWE) Mix 1949

***P. fruticosa* L. Shrubby cinquefoil**

FUNGI

- Phragmidium andersonii* Shear—Rust (ODA)
Phytophthora citrophthora (Sm. & Sm.) Leonian—From leaves and stems (Phytopath. 66:309) CMI 33
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (OS)

***P. nepalensis* Hook.**

FUNGI

Peronospora potentillae dBy.—Downy mildew (CWE)

***P. norvegica* L.**

FUNGI

Fabraea dehnii (Rab.) Nannf.—Leaf spot (OS) See Phytopathol. Z. 36:213-269

Peronospora potentillae dBy.—Downy mildew (CWE, Ohio J. Sci. 70:218)

Ramularia arvensis Sacc.—Leaf spot (OS)

***P. recta* L. Upright cinquefoil**

FUNGI

Phragmidium ivesiae Syd.—Rust (CWE)

***P. simplex* Michx. Common cinquefoil**

FUNGI

Phragmidium potentillae (Pers.) Karst.—Rust (OS)

Synchytrium sp.—Leaf gall (CWE) Verified by Karling as an unnamed species. (Personal communication)

Taphrina potentillae (Farl.) Johans.—Leaf blister (CWE) Mix 1949

***Prunus* sp. Plum (See *P. domestica*)**

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight (USDA Dept. Bull. 1366)

FUNGI

Valsa leucostoma (Pers.) Fr. (*Leucostoma persoonii* Hohn., Imp. St. *Cytospora*)—Twig blight, canker (Ibid.)

***Prunus* sp. Cherry (See *P. avium* and *P. cerasus*)**

BACTERIA

Agrobacterium tumefaciens (E.F. Smith & Towns.) Conn—Crown gall (OS)

Erwinia amylovora (Burr.) Winslow et al.—Fire blight, blossom blight (Plant Dis. Rptr. Sup. 14)

FUNGI

Valsa leucostoma (Pers.) Fr. (*Leucostoma persoonii* Hohn., Imp. St. *Cytospora*)—Twig blight, canker (USDA Dept. Bull. 1366)

***P. americana* Marsh. American plum, wild plum**

BACTERIA

Xanthomonas campestris pv. *pruni* (E.F. Smith) Dye—Bacterial spot (Plant Dis. Rptr. Sup. 28)

***P. armeniaca* L. Apricot**

BACTERIA

Agrobacterium tumefaciens (E.F. Smith & Towns.) Conn—Crown gall (ODA)

FUNGI

Monilinia fructicola (Wint.) Honey—Brown rot (USDA Dept. Bull. 1366)

***P. avium* L. Sweet cherry**

BACTERIA

Pseudomonas syringae Van Hall—Canker, gummosis (OS) Walker 1956

FUNGI

Cercospora circumscissa Sacc.—Leaf spot (Plant Dis. Rptr. Sup. 9)

Coccomyces hiemalis Higgins [*Blumeriella jaapii* (Rehm) Arx; Imp. St. *Cylindrosporium* (*Phloeosporrella*)]—Shot-hole leaf spot (OS) Sutton 1980; Phytopathol. Z. 42:161

Monilinia fructicola (Wint.) Honey—Brown rot (OS, C) Byrde & Willetts 1977

Taphrina wiesneri (Rathay) Mix (*T. cerasi* Fckl.)—Witches'-broom (OS) Mix 1949; CMI 712

VIRUSES, VIROIDS, MYCOPLASMAS

Prune dwarf virus—Ringspot and tatter-leaf (USDA Handbook 437) CMI/AAB No. 19

***P. besseyi* Bailey Sand cherry**

FUNGI

Oidium sp.—Powdery mildew (CWE)

***Prunus x blireiana* Andre Western sand cherry**

BACTERIA

Agrobacterium tumefaciens (E.F. Smith & Towns.) Conn—Crown gall (ODA)

FUNGI

Apiosporina morbosa (Schw.) Arx —Black knot (CWE, ODA) See *P. cerasus*

***P. cerasifera* J.F. Ehrh. Cherry plum**

FUNGI

Apiosporina morbosa (Schw.) Arx—Black knot (CWE, ODA) Ibid.

Podosphaera clandestina (Wallr.) Lev.—Powdery mildew (OS)

***P. cerasus* L. Sour cherry**

FUNGI

Armillaria mellea (Vahl. ex Fr.) Kummer —Root rot (Plant Dis. Rptr. Sup. 1)

Apiosporina morbosa (Schw.) Arx [*Dibotryon m.* (Schw.) Theiss. & Syd., Imp. St. *Fusicladium*]—Black knot (OS, C) Fungi Canadenses No. 84; Can. J. Bot. 46:799

Coccomyces hiemalis Higgins—Leaf spot (OS) (See *P. avium*)

Fusicladium cerasi (Rabh.) Sacc. (Perf. St. *Venturia c.* Aderh.)—Scab (OS) Phytopath. 18:313; CMI 706. Status of this report uncertain.

Monilinia fructicola (Wint.) Honey—Brown rot (OS) Byrde & Willetts 1977

Podosphaera clandestina (Wallr.) Lev.—Powdery mildew (OS)

NEMATODES

Pratylenchus sp.—Lesion nematode (JDW; Ohio Farm and Home Res., May-June 1961)

Xiphinema sp.—Dagger nematode (Ibid.)

VIRUSES, VIROIDS, MYCOPLASMAS

Prune dwarf virus—Sour cherry yellows (USDA Agr. Handbook 437)

***P. x cistena* N.E.Hansen Purple-leaf sand cherry**

BACTERIA

Agrobacterium tumefaciens (E.F. Smith & Towns.) Conn—Crown gall (ODA)

FUNGI

Apiosporina morbosa (Schw.) Arx—Black knot (ODA) See *P. cerasus*

Cylindrosporium sp.—Leaf spot (ODA)

Monilinia fructicola (Wint.) Honey—Brown rot (ODA)

***Prunus domestica* L. Plum**

BACTERIA

Agrobacterium tumefaciens (E.F. Smith & Towns.) Conn—Crown gall (OS)

FUNGI

Apiosporina morbosa (Schw.) Arx—Black knot (OS) See *P. cerasus*

Cladosporium carpophilum Thum. (*Fusicladium c.*; Perf. St. *Venturia c.* Fisher)—Scab (USDA Dept. Bull. 1366) Ellis 1971

Coccomyces prunophorae Higgins (Imp. St. *Cylindrosporium p.* Higgins)—Shot-hole, leaf spot (OS) See Sutton 1980 for recent changes in nomenclature.

Monilinia fructicola (Wint.) Honey—Brown rot (OS) Byrde & Willetts 1977

Podosphaera clandestina (Wallr.) Lev.—Powdery mildew (CWE; Ohio J. Sci. 66:570-581)

Taphrina communis (Sadeb.) Gies.—Plum pockets (OS, CWE) Mix 1949

VIRUSES, VIROIDS, MYCOPLASMAS

Line pattern virus—Line pattern (PDI)

***P. glandulosa* Thunb. Flowering almond**

BACTERIA

Xanthomonas campestris pv. *pruni* (Smith) Dye—Leaf spot, shot-hole (CWE)

FUNGI

Monilinia fructicola (Wint.) Honey—Twig blight (C, CWE)

***P. laurocerasus* L. Cherry-laurel**

FUNGI

Cercospora sp.—Leaf spot (C)

***P. persica* (L.) Batsch Peach**

BACTERIA

Agrobacterium tumefaciens (E.F. Smith & Towns.) Conn—Crown gall (OS)

Xanthomonas campestris pv. *pruni* (Smith) Dye—Bacterial leaf and fruit spot, stem canker (OS, CWE)

FUNGI

Armillaria mellea (Vahl ex Fr.) Kummer—Root rot (OS; Selby 1910)
Cercospora persicae Sacc. (Perf. St. *Mycosphaerella*)—Frosty mildew (Selby 1910)

Cladosporium carpophilum Thum. (Perf. St. *Venturia* c. Fisher)—Scab (OS) Ellis 1971; CMI 402

Glomerella cingulata (Stonem.) Spauld. & Schrenk—Fruit rot (Plant Dis. Rptr. 35:465)

Monilinia fructicola (Wint.) Honey—Brown rot, blossom blight, twig blight (OS) Byrde & Willetts 1977

Phytophthora cactorum (Leb. & Cohn.) Schroet.—Root and crown rot (MAE; Plant Dis. 73: 794)

P. cryptogea Pethybr. & Laff.—Root and crown rot (Ibid.)

P. megasperma Drechs.—Root and crown rot (Ibid.)

Rhizopus stolonifer (Ehr. ex Fr.) Vuill.—Fruit rot (CWE)

Sphaerotheca pannosa (Wallr.) Lev.—Powdery mildew on fruits (CWE)
Stigmata carpophila (Lev.) Ellis (*Coryneum beijerinckii* Oud.)—Pustular spot, shot-hole (OS, Collected by A.L. Pierstorff) Ellis 1971

Taphrina deformans (Berk.) Tul.—Leaf curl (OS)

Tranzschelia discolor (Fckl.) Tranz. & Litv. [*T. pruni-spinosae* (Pers.) Diet.]—Leaf rust (USDA Yearbook 1906) CMI 287

Valsa cincta Fr. [*Leucostoma cinctum* (Fr.) Hoehnel; Imp. St. *Cytospora cincta* Sacc.]—From stems, canker (PDI) Phytopathol. Z. 30:149; Can. J. Plant Path. 4:221

V. leucostoma (Pers.) Fr. (*Leucostoma persoonii* Hoehnel; Imp. St. *Cytospora leucostoma* Sacc.)—Canker, dieback (MAE) Ibid.

VIRUSES, VIROIDS, MYCOPLASMAS

Mycoplasma like organism (MLO)—Little peach (USDA Agr. Handbook 437)

Mycoplasma like organism (MLO) —Yellows (OAES Bull. 169; USDA Agr. Handbook 437)

Spiroplasma—X-disease (USDA Agr. Handbook 437)

Tomato ringspot virus—Stem pitting (Ibid.) CMI/AAB No. 290

***P. serotina* Ehrh. Wild black cherry**

FUNGI

Apiosporina morbosa (Schw.) Arx [*Dibotryon morbosum* (Schw.) Theiss. & Syd.]—Black knot (OS) See *P. cerasus*.

***P. serrulata* Lindl. Japanese flowering cherry**

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight (PDI)

***P. virginiana* L. Choke cherry**

FUNGI

Apiosporina morbosa (Schw.) Arx—Black knot (PDI) See *P. cerasus*
Coccomyces lutescens Higgins [*Blumeriella jaapii*; Imp. St. *Phloeosporella* (*Cylindrosporium*)]—Leaf spot, shot-hole (PDI) Sutton 1980

Podosphaera clandestina (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

VIRUSES, VIROIDS, MYCOPLASMAS

Spiroplasma—X-disease (USDA Agr. Handbook 437)

***Pyracantha atalantioides* (Hance) Stapf Fire-thorn**

FUNGI

Spilocaea pyracanthae (Othth) Arx—Scab (CWE) Ellis 1976

***P. coccinea* M.J. Roem. Fire-thorn**

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Bacterial fire blight (CWE, OS, C) USDA Agr. Handbook 510

FUNGI

Spilocaea pyracanthae (Othth) Arx—Scab (CWE, OS, C) Ellis 1976

***Pyrus calleryana* Decne. Callery pear**

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight (CWE) USDA Agr. Handbook 510

FUNGI

Entomosporium mespili (DC. ex Duby) Sacc. [Perf. St. *Diplocarpon mespili* (Sorauer) Sutton]—Leaf blight (CWE) Sutton 1980; Mycologia 58:949

***P. communis* L. Pear**

BACTERIA

Agrobacterium tumefaciens (E.F. Smith & Towns.) Conn—Crown gall (OS)

Erwinia amylovora (Burr.) Winslow et al.—Fire blight (OS) USDA Agr. Hdbk. 510

Pseudomonas syringae VanHall—Twig blight (MAE)

FUNGI

Botryosphaeria obtusa (Schw.) Shoem. (Imp. St. *Sphaeropsis malorum* Pk.)—Canker and fruit rot (OS) Barr 1972. See *Malus sylvestris*
Coniothyrium pirinum (Sacc.) Sheldon—Leaf spot (Plant Dis. Rptr. Sup. 1)

Entomosporium mespili (DC. ex Duby) Sacc. [Perf. St. *Diplocarpon mespili* (Sorauer) Sutton]—Leaf blight (OS) Sutton 1980; Mycologia 58:949; CMI 481

Fusicladium pyrorum (Lib.) Fckl. (Perf. St. *Venturia pirina* Aderh.)—Scab (OS) Fungi Canadenses No. 36

Gloeodes pomigena (Schw.) Colby—Sooty blotch (CWE)

Gymnosporangium globosum Farl.—Rust (USDA Dept. Bull. 1366) Kern 1973

Monilinia fructicola (Wint.) Honey—Brown rot (CWE) Byrde & Willetts 1977

Penicillium sp.—Blue mold rot (CWE)

Phytophthora cactorum (Leb. & Cohn) Schroet.—Collar rot (MAE)

Septoria piricola Desm. [Perf. St. *Mycosphaerella sentina* (Fckl.) Schroet.]—Leaf spot (OS)

INSECTS, MITES

Phytoptus pyri Pagenstecher (*Eriophyes pyri* Pgst.)—Leaf blister caused by pear leaf blister mite (CWE) USDA Agr. Handbook 573; Johnson & Lyon 1976

***Rosa* spp. Rose. General reference—Compendium of Rose Diseases. 1983. Amer. Phytopathological Society. Most of the records are on the several species and cultivars of garden roses.**

BACTERIA

Agrobacterium tumefaciens (E.F. Sm. & Towns.) Conn—Bacterial crown gall (OS)

FUNGI

Botrytis cinerea Pers.—Bud and flower blight; cutting rot and storage mold (CWE)

Cercospora rosicola Pass. [Perf. St. *Mycosphaerella rosicola* (Pass.) B.H. Davis]—Leaf spot (OS) *Mycologia* 30:282-298
Coniothyrium fuckelii Sacc. [Perf. St. *Leptosphaeria coniothyrium* (Fckl.) Sacc.]—Common canker (OS) *Jour. Agr. Res.* 40:805-827
C. wernsdorffiae Laub.—Brand canker (OS)
Cryptosporella umbrina (Jenkins) Jenkins & Wehm. (*Diaporthe u.* Jenkins)—Brown canker (Ohio Agr. Exp. Sta. Bull. 511) *Jour. Agr. Res.* 15:593-600
Cylindrocladium scoparium Morgan—Crown canker (Plant Dis. Rptr. Sup. 63)
Diplocarpon rosae Wolf [Imp. St. *Marssonina rosae* (Lib.) Died.]—Black spot (OS)
Peronospora sparsa Berk.—Downy mildew on roses under glass (OS) Not reported in Ohio on garden roses. CMI 690
Phragmidium spp.—Leaf and stem rusts. Several species are on roses. The following have been reported in Ohio on garden roses or native species.
P. americanum (Pk.) Diet.—Leaf rust on *Rosa* sp. and *R. setigera* Michx. (OS)
P. mucronatum (Pers.) Schlecht.—Leaf rust (OS) This is the species usually found on the garden rose in Ohio. Cornell Univ. Agr. Exp. Sta. Memoir 268; CMI 204
P. speciosum (Fr.) Cke.—Leaf and stem rust on *Rosa* spp. (OS)
Phyllosticta rosae Desm.—Leaf spot (*Mycologia* 65:196)
Phyllosticta rosicola Massal.—Leaf spot (OS) Possibly a spermatial stage of *Mycosphaerella*.
Pythium irregulare Buism.—Root rot (AFS)
Rhizoctonia solani Kuehn—From roots (C)
Sphaeloma rosarum (Pass.) Jenkins (Perf. St. *Elsinoe r.* Jenkins & Bitancourt)—Spot anthracnose (OS) *Jour. Agr. Res.* 45:321-337; *Mycologia* 49:95-101
Sphaerotheca pannosa (Wallr.) Lev.—Powdery mildew (OS) Perf. St. rare in Ohio.
Verticillium albo-atrum Reinke & Berth.—Verticillium wilt (CWE) CMI 255, 256

NEMATODES

Pratylenchus penetrans (Cobb) Filip. & Stekhoven—Lesion nematode (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Rose rosette virus—Rose rosette on *Rosa multiflora* (W. Va. Univ. Agr. and Forestry Exp. Sta. Cir. 147) USDA Agr. Handbook 573
 Virus—Mosaics and other virus-like symptoms. Specific viruses or graft-transmissible agents have not been identified.

ABIOTIC

Unknown cause—Pedicel necrosis

Rubus spp. Wild blackberries

FUNGI

Gymnoconia peckiana (Howe) Trotter—Orange rust (CWE) See Cummins and Hiratsuka 1983
Kuehneola uredinis (Lk.) Arth.—Cane & leaf rust (PDI)
Kunkelia nitens (Schw.) Arth.—Orange rust (PDI) See Cummins and Hiratsuka 1983
Peronospora rubi Rab. ex Schroet.—Downy mildew (CWE; Ohio J. Sci. 70:218)

Rubus spp. Dewberries

BACTERIA

Agrobacterium tumefaciens (Smith & Towns.) Conn—Crown gall (OS)

FUNGI

Cercospora rubi Sacc.—Leaf spot (OS)
Cercospora rubi (Wint.) Plakidas—Rosette (USDA Bull. 1366)
Cylindrosporium rubi Ell. & Morg. (*Septoria rubi* West; Perf. St. *Sphaerulina rubi* Demaree & Wilcox)—Leaf spot (OS)
Kunkelia nitens (Schw.) Arth.—Orange rust (OS)
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (PDI)

VIRUSES, VIROIDS, MYCOPLASMAS

Virus—Leaf curl (PDI)

Rubus allegheniensis Porter Blackberry. General reference USDA Agr. Handbook 310 (Converse 1966)

BACTERIA

Agrobacterium tumefaciens (Smith & Towns.) Conn—Crown gall (Plant Dis. Rptr. Sup. 1)

FUNGI

Botryosphaeria obtusa (Schw.) Shoem. (Imp. St. *Sphaeropsis malorum* Pk.)—Canker (Plant Dis. 68:812) Barr 1972. See *Malus sylvestris*
Botrytis cinerea Pers.—Gray mold fruit rot (CWE)
Cylindrosporium rubi Ell. & Morgan—See *Septoria*
Elsinoe veneta (Burkh.) Jenkins (Imp. St. *Sphaeloma*) Anthracnose (OAES Bull. 79) *Phytopath.* 36:1043; Anderson 1956; CMI 484
Gnomonia rubi (Rehm.) Wint.—Canker (Plant Dis. 68:812) Barr 1978
Gymnoconia peckiana (Howe) Trotter—Orange rust (OS) See *Rubus* spp.
Kuehneola uredinis (Lk.) Arth.—Cane and leaf rust (OS) *Fungi Canadenses* No. 307
Kunkelia nitens (Schw.) Arth.—Orange rust (OS) See *Rubus* spp.
Leptosphaeria coniothyrium (Fckl.) Sacc. (Imp. St. *Coniothyrium fuckelii* Sacc.)—Cane blight (Plant Dis. 68:812) Anderson 1956; CMI 663; Ellis & Ellis 1985
Septoria rubi Westend. (*Cylindrosporium rubi* Ell. & Morgan; Perf. St. *Sphaerulina*)—Leaf and cane spot (OS) *Phytopath.* 33:986. Several species of *Septoria* have been reported on *Rubus* spp. Further study is indicated to determine their status and perfect state names.
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (Plant Dis. Bull. Sup. 9:70 and 11:302)

VIRUSES, VIROIDS, MYCOPLASMAS

Virus (?)—Mosaic symptoms (CWE)
 Virus (?)—Blackberry sterility (OCES Bull. 783)
 Virus—Streak (PDI)

Rubus idaeus L. Red raspberry. General reference—USDA Agr. Handbook 310 (Converse 1966)

BACTERIA

Agrobacterium tumefaciens (Smith & Towns.) Conn—Crown gall (OS)

FUNGI

Botrytis cinerea Pers.—Fruit rot and flower blight (MAE)
Cylindrosporium rubi—See *Septoria*
Didymella applanata (Niessl) Sacc. (Imp. St. *Phoma*)—Spur blight (OS) CMI 735; *Fungi Canadenses* No. 49
Elsinoe veneta (Burkh.) Jenkins [Imp. St. *Sphaeloma necator* (Ell. & Ev.) Jenkins & Shear]—Anthracnose, gray bark (OS) CMI 484; Anderson 1956
Glomerella cingulata (Ston.) Spaulding & Schrenk—Canker & dieback (PDI) *Phytopath.* 17:769
Leptosphaeria coniothyrium Sacc. (Imp. St. *Coniothyrium fuckelii* Sacc.)—Cane blight (OS) CMI 663; Ellis & Ellis 1985
Phytophthora spp.—Root and crown rot (MAE) OCES Bull. 783
Pucciniastrum americanum (Farl.) Arth.—Late leaf rust, fruit rust (CWE, MAE; Plant Dis. 65:924) J. Agr. Res. 24:885; CMI 210. Aecia on *Picea*.
Septoria rubi Westend.—Leaf spot (OS) See *R. allegheniensis*
Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (MAE, OS)
Verticillium dahliae Kleb.—Wilt (OCES Bull. 783)

VIRUS, VIROIDS, MYCOPLASMAS

Virus complex—Mosaic. Specific virus or viruses not identified.
 Virus—Leaf curl (PDI)
 Tomato ringspot virus—Low vigor, crumbly berries (MAE, C) CMI/AAAB No. 290

R. occidentalis L. Black raspberry. General reference—USDA Agr. Handbook 310 (Converse 1966)

BACTERIA

Agrobacterium tumefaciens (Smith & Towns.) Conn—Crown gall (OS)

FUNGI

Botrytis cinerea Pers.—Gray mold fruit rot (MAE)
Cylindrosporium rubi Ell. & Morgan—See *Septoria*—Leaf spot (OS) *Phytopathology* 33:986

Elsinoe veneta (Burkh.) Jenkins [Imp. St. *Sphaceloma necator* (Ell. & Ev.) Jenkins & Shear]—Anthracnose, cane and leaf spot (OS) CMI 484

Glomerella cingulata (Stonem.) Spaulding & Schrenk (Imp. St. *Colletotrichum*)—Canker & dieback (Phytopath. 17:769)

Gymnoconia peckiana (Howe) Trotter—Orange rust (OS)

Kunkelia nitens (Schw.) Arth.—Orange rust (OS) See Cummins and Hiratsuka 1983 for recent nomenclature

Leptosphaeria coniothyrium (Fckl.) Sacc. (Imp. St. *Coniothyrium fuckelii* Sacc.)—Cane blight, canker (Plant Dis. Rptr. Sup. 9) CMI 663

Pezizella oenotherae (Cke. & Ell.) Sacc. [Imp. St. *Hainesia lythri* (Desm.) Hohn.]—Leaf and cane spot (PDI) Sutton 1980; CMI 535

Septoria rubi Westend.—Leaf spot (OS) See *R. allegheniensis*

Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (PDI)

Verticillium dahliae Kleb.—Wilt (C) CMI 255, 256

VIRUSES, VIROIDS, MYCOPLASMAS

Tobacco streak virus—Raspberry streak (OCES Bull. 783)

Virus complex—Mosaic (PDI) See OCES Bull. 783

Virus—Leaf curl (PDI) Ibid.

Rubus odoratus L. Flowering raspberry

FUNGI

Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (OS)

Sanguisorba canadensis L. American burnet

FUNGI

Sphaerotheca macularis (Wallr.) Lind—Powdery mildew (OS)

Sorbus americana Marsh. American Mt. Ash

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Bacterial fire blight (C) USDA Agr. Handbook 510

FUNGI

Phyllosticta ?sorbi West.—Leaf spot (CWE)

S. aucuparia L. European Mt. Ash

BACTERIA

Erwinia amylovora (Burr.) Winslow et al.—Fire blight (C) USDA Agr. Handbook No. 510

FUNGI

Botryosphaeria obtusa (Schw.) Shoem. (Imp. St. *Sphaeropsis malorum*)—Canker (C)

Cytospora sp.—Canker (CWE, C)

Dothiorella sp.—On branches (C)

Septoria ?sorbi Lasch—Leaf spot (ODA) Ellis & Ellis 1985

Valsa leucostoma (Pers.) Fr. (*Leucostoma*, Imp. St. *Cytospora*)—Canker (PDI)

Venturia inaequalis (Cke.) Wint.—Scab (C)

Verticillium albo-atrum Reinke & Berth. (ODA) CMI 255, 256

Spiraea x billiardii Harincq. Billiard Spiraea

FUNGI

Cylindrosporium filipendulae Thuem.—Leaf spot (CWE, OS) Mycologia 49:262

S. tomentosa L. Steeplebush

FUNGI

Podosphaera clandestina (Wallr.) Lev.—Powdery mildew (NFC)

S. x vanhouttei (C. Briot.) Zabel Bridal wreath

FUNGI

Cylindrosporium filipendulae Thuem.—Leaf spot (CWE) Mycologia 49:262

Waldesteinia fragarioides (Michx.) Tratt. Barren-strawberry

FUNGI

Septoria waldsteiniae Pk. & G.W. Clint.—Leaf spot (OS)

RUBIACEAE

Cephalanthus occidentalis L. Buttonbush

None reported

Galium aparine L. Common cleavers

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE)

Peronospora calotheca dBy.—Downy mildew (CWE; Ohio J. Sci. 70:218)

Puccinia difformis Kunze—Rust (Arthur 1934)

P. punctata Lk.—Rust (OS)

G. concinnum T. & G. Shining bedstraw

FUNGI

Puccinia punctata Lk.—Rust (OS)

G. mollugo L.

FUNGI

Puccinia punctata Lk.—Rust (OS)

Gardenia jasminoides Ellis Garden gardenia

FUNGI

Phomopsis gardeniae Hansen & Barrett—Canker (OS; OAES Bimonth. Bull. 19:116) Mycologia 30:15

ABIOTIC

Physiological—Bud drop

Houstonia caerulea L. Bluets

FUNGI

Uromyces houstoniatus Sheldon—Rust (OS)

Mitchella repens L. Partridge berry

None reported

RUTACEAE

Citrus sp. Foliage plant

FUNGI

Colletotrichum gloeosporioides Penz.—Anthracnose (C)

Ptelea trifoliata L. Hoptree

FUNGI

Puccinia windsoriae Schw.—Rust (OS)

SALICACEAE

Populus sp. Poplar

FUNGI

Cytospora spp.—On stems; ? dieback (CWE)

Fusarium solani (Mart.) Appel & Wr.—Canker reported on a number of hybrid poplars (Plant Dis. Rptr. 56:523)

Pleurotus ostreatus (Jacq. ex Fr.) Kummer—Wood rot (CWE) Miller 1972

Septotinia populiperda Waterman & Cash (Imp. St. *Septotis* sp.) Leaf blotch—(CWE) Mycologia 42:374. On hybrid poplars, Coshocton county

P. alba L. White poplar

FUNGI

Cytospora chrysosperma Fr. (Imp. St. *Valsa sordida*)—On stems; canker (OS)

Marssonina castagnei (Desm. & Mont.) Magn. (Perf. St. *Drepanopeziza*)—Leaf spot (OS) Fungi Canadenses 14; European J. For. Path. 14:202; Funk 1985; Phytopathol. Z. 43:257

Phyllosticta alcides Sacc.—Leaf spot (PDI)

***P. balsamifera* L. (*P. tacamahaca* Mill.) Balsam poplar**

FUNGI

Melampsora medusae Thuem.—Leaf rust (OS) Ziller 1974. Aecia on *Larix*.
Septoria musiva Pk. (Perf. St. *Mycosphaerella populorum* G.E. Thompson)—Leaf spot and canker (C, CWE) Phytopath. 31:241; Funk 1985

***P. x canadensis* Moench. Carolina poplar**

FUNGI

Dothichiza populea Sacc. & Briard [*Chondroplea populea* (Sacc.) Kleb., *Discosporium populeum* (Sacc.) Sutton; Perf. St. *Cryptodiaporthes*—Canker (OS, CWE) Sutton 1980; CMI 364

***P. deltoides* Marsh. Cottonwood**

FUNGI

Marssonina sp.—Leaf spot (PDI) Funk 1985
Melampsora medusae Thuem.—Leaf rust (OS) Ziller 1974; European J. Forest Path. 14:266 (Aecia on *Larix*)
Pleurotus ostreatus (Jacq. ex Fr.) Kummer—Sapwood and heartwood decay (CWE) Miller 1972
Uncinula adunca (Wallr.) Lev. (*U. salicis* DC. ex Wint.)—Powdery mildew (OS)

***P. grandidentata* Michx. Large-toothed aspen**

FUNGI

Melampsora abietis-canadensis Ludwig ex Arth.—Leaf rust (OS) Aecia on *Tsuga*
Valsa spp. (Imp. St. *Cytospora*)—Twig canker (OS) See Phytopath. 30:459

***P. nigra* L. (cv. *Italica*) Lombardy poplar**

FUNGI

Dothichiza populea Sacc. & Briard —Canker (OS) See *P. x canadensis*

***P. tremuloides* Michx. Quaking aspen**

FUNGI

Ciborinia whetzelii (Seav.) Seav. [*C. bifrons* (Whetz.) Whetz.]—Ink spot. Sclerotial state only (CWE, OS) Seaver 1942; Funk 1985; Can. J. Bot. 33:577
Melampsora abietis-canadensis Ludwig ex Arth.—Leaf rust (OS) Aecia on *Tsuga*
M. medusae Thuem.—Leaf rust (OS) Ziller 1974. Aecia on *Larix*
Septoria musiva Pk. (Perf. St. *Mycosphaerella*)—Leaf spot (PDI) Funk 1985. See *P. balsamifera*
Uncinula adunca (Wallr.) Lev. (*U. salicis*)—Powdery mildew (OS)

***Salix* sp. Willow**

FUNGI

Daedalea confragosa Bolt. ex Fr.—Heart rot (Overholts 1914) Overholts 1953
Discella carbonacea (Fr.) Berk. [*Diplodina microsperma* (Johnston) Sutton; Perf. St. *Cryptodiaporthes*]—Twig blight (PDI) Sutton 1980
Marssonina sp.—Leaf spot (CWE)
Melampsora epitea Thuem.—Leaf rust (OS) Many species of *Salix* are hosts. Aecia on *Abies* spp.
M. paradoxa Diet. & Holw. (*M. bigelowii*)—Leaf rust (OS) On many species of *Salix*. Aecia on *Larix*
Rhytisma salicinum Pers. ex Fr.—Tar spot (PDI) Funk 1985
Trametes suaveolens (L. ex Fr.) Fr.—White spongy heart rot (Overholts, 1914) Overholts 1953
Valsa spp. (Imp. St. *Cytospora*)—Twig blight, canker; ?secondary (CWE) Phytopathology 30:459-475

***S. alba* L. White willow**

BACTERIA

Agrobacterium tumefaciens (Smith & Towns.) Conn—Crown gall (ODA)

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (*B. ribis*; Imp. St. *Dothiorella*)—Twig blight (CWE) Barr 1972; Arx 1987
Fusicladium sp. [? *Pollaccia saliciperda* (All. & Tub.) Arx; Perf. St. *Venturia*]—Scab, twig blight (ODA, PK) Can. J. Bot. 46:799; CMI 482

***S. babylonica* L. Weeping willow**

BACTERIA

Agrobacterium tumefaciens (Smith & Towns.) Conn—Crown gall (ODA)

***S. caprea* L. Pussy willow**

FUNGI

Uncinula adunca (Wallr.) Lev. (*U. salicis*)—Powdery mildew (ODA)

***S. cordata* Muhl. Heartleaf willow**

FUNGI

Melampsora epitea Thuem.—Leaf rust (OS) Aecia on *Abies*
Uncinula adunca (Wallr.) Lev.—Powdery mildew (OS)

***S. discolor* Muhl. Pussy willow**

BACTERIA

Agrobacterium tumefaciens (Smith & Towns.) Conn—Crown gall (ODA)

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (See *S. alba*)—Twig blight (CWE) Barr 1972; Arx 1987
Cytospora sp.—From twigs (Plant Dis. Rptr. Sup. 90)
Uncinula adunca (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

***S. fragilis* L. Crack willow**

FUNGI

Melampsora epitea Thuem.—Leaf rust (OS)

***S. humilis* Marsh. Gray willow**

FUNGI

Uncinula adunca (Wallr.) Lev. (*U. salicis*)—Powdery mildew (Ohio J. Sci. 66:570)

***S. interior* Rowlee Sandbar willow**

FUNGI

Melampsora epitea Thuem. (*M. abieti-capraearum*)—Leaf rust (N. Amer. Flora 7:669) Aecia on *Abies*

***S. lucida* Muhl. Shining willow**

FUNGI

Rhytisma salicinum Pers.—Tar spot (OC) Funk 1985

***S. nigra* Marsh. Black willow**

FUNGI

Melampsora epitea Thuem.—Leaf rust (OS) Aecia on *Abies*
Uncinula adunca (Wallr.) Lev. (*U. salicis*)—Powdery mildew (Ohio J. Sci. 66:570)

SANTALACEAE

***Comandra umbellata* (L.) Nutt. Bastard toadflax**

FUNGI

Cronartium comandrae Pk.—Rust (Arthur 1934)
Puccinia andropogonis Schw.—Rust (OS)

SARRACENIACEAE

Sarracenia purpurea L. Pitcherplant

FUNGI

Pestalotia (? *Pestalotipsis*) sp.—Leaf spot (secondary) (OS)

SAURURACEAE

Saururus cernuus L. Lizardtail

FUNGI

Cercospora saururi Ell. & Ev.—Leaf spot (OC)

SAXIFRAGACEAE

Astilbe x arendsii Arends. False spiraea

NEMATODES

Meloidogyne hapla Chitwood—Root knot (RMR)

Chrysosplenium americanum Schwein. Golden saxifrage

FUNGI

Septoria sp.—Leaf spot (CWE)

Deutzia sp.

FUNGI

Phyllosticta deutziae Ell. & Ev.—Leaf spot (OS)

Heuchera americana L. Alum-root

FUNGI

Cercospora heucherae Ell. & G. Martin—Leaf spot (OS)

Puccinia heucherae (Schw.) Diet.—Rust (OS)

Septoria heucherae Pass.—Leaf spot (CWE, OS)

H. pubescens Pursh

FUNGI

Cercospora heucherae Ell. & G. Martin—Leaf spot (CWE)

H. sanguinea Engelm. Coralbells

FUNGI

Cercospora heucherae Ell. & G. Martin—Leaf spot (CWE)

Rhizoctonia solani Kuehn—Seedling blight (Stephens, Ph.D. Dissertation. OSU 1978)

Hydrangea arborescens L. Wild hydrangea

FUNGI

Erysiphe polygoni DC.—Powdery mildew (OS)

Pucciniastrum hydrangeae (Magn.) Arth.—Leaf rust (OS) Aecia on *Tsuga*

H. macrophylla (Thunb.) Ser. Florist's hydrangea

FUNGI

Botrytis cinerea Pers.—Gray mold blight, cutting rot (CWE)

Oidium sp.—Powdery mildew (CWE)—Probably *Erysiphe polygoni* DC.

Phyllosticta sp.—Leaf spot (CWE, OS)

Rhizoctonia solani Kuehn—Cutting rot (CWE)

H. paniculata Sieb. Panicle hydrangea

FUNGI

Septoria hydrangeae Bizz.—Leaf spot (Plant Dis. Rptr. Sup. 5)

Mitella diphylla L. Mitrewort, Bishop's-cap

FUNGI

Puccinia heucherae (Schw.) Diet.—Rust (OS)

Ramularia mitellae Pk.—Leaf spot (Rpt. Geol. Survey Ohio V. 7 (1893)

Septoria mitellae Ell. & Ev.—Leaf spot (OS)

Philadelphus coronarius L. Mock orange

BACTERIA

Pseudomonas syringae van Hall—Bacterial leaf spot (CWE) Plant Dis. 68:916

FUNGI

Phyllactinia guttata (Wallr.) Lev.—Powdery mildew (CWE)

P. x virginalis Rehd.

FUNGI

Cercospora angulata Wint.—Leaf spot (CWE)

Ribes spp. Currants (cult.)

FUNGI

Botryosphaeria dothidea (Moug. ex Fr.) Ces. & deNot. (*B. ribis*; Imp. St. *Dothiorella*)—Cane blight (OS) Barr 1972; Sutton 1980; Arx 1987

Pleonectria berolinensis Sacc. [*Thyronectria b.* (Sacc.) Seaver]—Cane knot (PDI) J. Arn. Arboretum 21:445

Puccinia ribis DC.—Rust (PDI)

Ribes alpinum L. Alpine currant

FUNGI

Gloeosporidiella variabilis (Laub.) Nannf. (Perf. St. *Drepanopeziza variabilis* Muller; *Pseudopeziza ribis*)—Anthracnose, leaf spot (PK, ODA) Sutton 1980

R. americanum Mill. Wild black currant

FUNGI

Puccinia caricina DC.—Rust (OS)

R. cynosbati L. Prickly gooseberry

FUNGI

Cronartium ribicola Fisch. ex Rabh.—White pine blister rust (Plant Dis. Rptr. 26:79) Uredia and telia on *Ribes* leaves

Puccinia caricina DC.—Rust (OS)

Sphaerotheca mors-uvae (Schw.) Berk. & Curt.—Powdery mildew (Ohio J. Sci. 66:570)

R. grossularia L. (*R. uva-crispa* L.) Garden or European gooseberry

FUNGI

Fomes ribis (Schum. ex Fr.) Gill. (*Phellinus*)—Collar or crown rot (OS, CWE) Overholts 1953

Gloeosporidiella ribis (Lib.) Petr. [*Gloeosporium r.* (Lib.) Mont. & Desm.; Perf. St. *Drepanopeziza r.* (Kleb.) v. Hoehn.]—Anthracnose leaf spot (OS, C) CMI 638; Anderson 1956

Septoria ribis Desm. [Perf. St. *Mycosphaerella r.* (Fckl.) Feltg.]—Leaf spot (OS) Mycologia 35:469

Sphaerotheca mors-uvae (Schw.) Berk. & Curt.—Powdery mildew (Ohio J. Sci. 66:570)

R. nigrum L. European black currant

FUNGI

Cronartium ribicola Fisch. ex Waldh.—White pine blister rust (1943 Ann. Rpt. White Pine Blister Rust Control in Indiana and Ohio; OS) Uredia and telia on leaves of *Ribes*

Gloeosporidiella ribis (Lib.) Petr.—Anthracnose leaf spot (OS) CMI 638; Anderson 1956. See *R. grossularia*

R. oxyacanthoides L. Northern gooseberry

FUNGI

Gloeosporidiella ribis (Lib.) Petr. (See *R. grossularia*)—Anthracnose leaf spot (OC) CMI 638; Anderson 1956

R. sativum (Rchb.) Syme Garden red currant

FUNGI

Botryosphaeria ribis Gross. & Dug. (*B. dothidea*)—Cane blight (J. Agr. Res. 27:837) See Arx 1987

Cercospora ribis Earle—Leaf spot (OS)

Gloeosporidiella ribis (Lib.) Petr. (See *R. grossularia*)—Anthracnose (OS) CMI 638; Anderson 1956

Nectria cinnabarina Tode (Imp. St. *Tubercularia vulgaris* Tode)—? Canker and dieback (USDA Yearbook 1906) CMI Mycol. Paper No. 73; CMI 531

Septoria ribis Desm. (Perf. St. *Mycosphaerella r.* (Fckl.) Feltg.—Leaf spot (USDA Yearbook 1906) Anderson 1956

Sphaerotheca mors-uvae (Schw.) Berk. & Curt.—Powdery mildew (OS)

Saxifraga virginensis Michx. Saxifrage

FUNGI

Puccinia heucherae (Schw.) Diet.—Rust (OS)

Tiarella cordifolia L. False mitrewort, foam flower

FUNGI

Ceratobasidium anceps (Bres. & Syd.) Jackson (Imp. St. *Sclerotium deciduum* Davis)—Leaf blight (CWE, OS)

Puccinia heucherae (Schw.) Diet.—Rust (OS, CWE)

SCROPHULARIACEAE

Antirrhinum majus L. Snapdragon

FUNGI

Botrytis cinerea Pers.—Stem rot and blossom blight (CWE) Ellis 1971
Cercospora antirrhini Muller & Chupp—Leaf spot (CWE) Verified by Chupp. N. Car. Agr. Exp. Sta. Tech. Bull. 179

Colletotrichum antirrhini F.C. Stewart—Anthracnose blight (CWE)
Correct name may be *C. gloeosporioides*

Erysiphe cichoracearum DC.—Powdery mildew (CWE) Ohio J. Sci. 66:570

Phyllosticta antirrhini Syd.—Leaf spot and stem canker (OS) Mycologia 25:237

Phytophthora parasitica Dast.—Stem rot (Phytopath. 58:718-719) CMI 35

Puccinia antirrhini Diet. & Holw.—Rust (OS, CWE)

Rhizoctonia solani Kuehn—Seedling blight (Stephens, M.Sc. Thesis, OSU 1976)

Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot (CWE) Mycotaxon 9:365
Verticillium albo-atrum Reinke & Berth.—Wilt (C) CMI 255, 256

NEMATODES

Meloidogyne sp.—Root knot (CWE)

VIRUSES, VIROIDS, MYCOPLASMAS

Virus (unidentified)—Mosaic (PDI)

Aureolaria flava (L.) Farw. (Gerardia flava L.) False foxglove

FUNGI

Cercospora gerardiae Ell. & Dearn.—Leaf spot (OC)

Chelone glabra L. Turtlehead

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

Septoria mariae-wilsonii G.W. Clint.—Leaf spot (Plant Dis. Rptr. Sup. 42)

Digitalis laevigata Waldst.-Kit

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

Gratiola neglecta Torr. Hedge hyssop

FUNGI

Septoria gratiolae Sacc. & Speg.—Leaf spot (OS)

Linaria vulgaris Mill. Butter and eggs

FUNGI

Colletotrichum vermicularioides Halst. (*C. gloeosporioides* Penz.)—Anthracnose, stem blight (OS, CWE) Arx 1970

Mimulus alatus Ait. Monkey flower

FUNGI

Cercospora mimuli Ell. & Ev.—Leaf spot (OC)

Septoria mimuli Ell. & Kell.—Leaf spot (OS) Amer. Nat. 17:1165

M. ringens L. Monkey flower

FUNGI

Ramularia mimuli L.—Leaf spot (Amer. Nat. 17:1166)

Rhabdospora kellermani Ell. & G. Martin—On leaves (PDI)

Septoria mimuli Ell. & Kell.—Leaf spot (Amer. Nat. 17:1165)

Paulownia tomentosa (Thunb.) Steud. Princess tree

FUNGI

Phyllosticta paulowniae Sacc.—Leaf spot (OS) Grove 1935

Pedicularis lanceolata Michx. Lousewort

FUNGI

Sphaerotheca macularis (Wallr.) Lind —Powdery mildew (Ohio J. Sci. 66:570) (May be *S. fuliginea*). Host may be *P. canadensis*

Penstemon sp. Beardtongue

FUNGI

Sclerotium rolfsii Sacc. (Perf. St. *Athelia*)—Crown rot (CWE) N. Car. Agr. Exp. Sta. Tech. Bull. 174; CMI 410

Penstemon digitalis Nutt. Foxglove beardtongue

FUNGI

Cercospora nivosa Ell. & Ev.—Leaf spot (Proc. Acad. Nat. Sci. Philadelphia 1895)

Septoria penstemonis Ell. & Ev.—Leaf spot (CWE) Bull. Torrey Bot. Club 11:73

P. ovatus Dougl. ex Hook.

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

P. proceris Dougl. ex Hook

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Ibid.)

Phygelia capensis E.H. Mey. ex Benth. Cape fuchsia

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Ibid.)

Scrophularia marilandica L. Figwort

FUNGI

Peronospora sordida Berk. & Br.—Downy mildew (OS)

Septoria scrophulariae Pk.—Leaf spot (OS)

Seymeria macrophylla Nutt. [Dasistoma macrophylla (Nutt.) Raf.] Mullein fox-glove

FUNGI

Puccinia seymeriae Burr.—Rust (OS)

Torenia fournieri Linden ex E. Fourn. Torenia

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE)

Verbascum blattaria L. Moth mullein

FUNGI

Septoria verbascicola Berk. & Curt.—Leaf spot (OS) J. Mycol. 3:78

V. thapsus L. Common mullein

FUNGI

Phyllosticta verbascicola Ell. & Kell.—Leaf spot (OS)
Ramularia variabilis Fckl.—Leaf spot (OS) Can. J. Bot. 46:467
Septoria verbascicola Berk. & Curt.—Leaf spot (OS)

Veronica sp.

FUNGI

Sclerotium rolfsii Sacc. (Perf. St. *Athelia*)—Crown rot (PDI) N. Car. Agr. Exp. Sta. Tech. Bull. 174

Veronica arvensis L. Speedwell

FUNGI

Peronospora grisea Ung.—Downy mildew (Ohio J. Sci. 70:218)
Septoria veronicae Rob. ex Desm.—Leaf spot (OS) Grove 1935

V. grandis Fisch. ex K. Spreng.

FUNGI

Sphaerotheca fuliginea (Schlecht.) Poll.—Powdery mildew (CWE)

V. incana L. Woolly speedwell

FUNGI

Septoria veronicae Rob. ex Desm.—Leaf spot (CWE) Grove 1935
Sphaerotheca fuliginea (Schlecht.) Poll.—Powdery mildew (Ohio J. Sci. 66:570)

V. latifolia L.

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

V. longifolia L.

FUNGI

Sphaerotheca fuliginea (Schlecht.) Poll.—Powdery mildew (Ohio J. Sci. 66:570)

NEMATODES

Meloidogyne hapla Chitwood—Root knot (Baringer 1930-34)

V. peregrina L. Purslane speedwell

FUNGI

Ramularia veronicae Fckl.—Leaf spot (Rpt. Geol. Survey Ohio, Vol. 7 1893)

V. persica Poir. Bird's-eye

FUNGI

Sorosphaera veronicae Schroeter—Leaf and stem gall (Mycologia 72:916)

V. serpyllifolia L. Thyme-leaved speedwell

FUNGI

Ramularia veronicae Fckl.—Leaf spot (CWE)

Sphaerotheca fuliginea (Schlecht.) Poll.—Powdery mildew (Ohio J. Sci. 66:570; CWE)

V. spicata L.

FUNGI

Ramularia veronicae Fckl.—Leaf spot (CWE)
Sphaerotheca fuliginea (Schlecht.) Poll.—Powdery mildew (CWE)

SIMAROUBACEAE

Ailanthus altissima (Mill.) Swingle Tree-of-heaven

FUNGI

Leptothyrium petiolorum (Cke. & Ell.) Sacc.—On petioles (PDI)
Phomopsis sp.—On twigs (PDI)

SOLANACEAE

Capsicum annuum L. Pepper (Sometimes listed as C. frutescens)

BACTERIA

Erwinia carotovora Jones—Bacterial soft rot (Plant Dis. 64:191)
Xanthomonas campestris pv. *vesicatoria* (Doidge) Dye—Bacterial leaf and fruit spot (OS)

FUNGI

Alternaria sp.—Black mold, secondary following sun scald of fruit (CWE)
Alternaria solani (Ell. & G. Martin) Sor.—Leaf blight (OS) Ellis 1971
Botrytis cinerea Pers.—Stem canker (C)
Cercospora capsici Heald & Wolf—Frogeye leaf spot (Plant Dis. Rptr. Sup. 96)
Colletotrichum gloeosporioides Penz. [Perf. St. *Glomerella cingulata* (Ston.) Spauld. & Schrenck]—Anthracnose fruit rot (Plant Dis. Rptr. 25:192) Arx 1970; Walker 1952
Phytophthora capsici Leonian—Fruit and stem rot (Plant Dis. Rptr. Sup. 86; RCR) CMI 836
Pythium aphanidermatum (Edson) Fitz.—Seedling blight (AFS)
P. ultimum Trow—Seedling blight (AFS)
Rhizoctonia solani Kuehn—Seedling blight and stem canker (C)
Verticillium dahliae Kleb.—Wilt (C) CMI 255, 256

NEMATODES

Meloidogyne hapla Chitwood—Root knot (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Virus—Mosaic (PDI, CWE) ? Cucumber mosaic virus

Datura stramonium L. Jimson-weed

FUNGI

Alternaria crassa (Sacc.) Rands—Leaf spot (CWE) Ellis 1971

Lycium halimifolium Mill. Matrimony vine

FUNGI

Microsphaera diffusa Cke. & Pk.—Powdery mildew (PDI)
Phyllosticta lycii Ell. & Kell.—Leaf spot (OC)
Puccinia tumidipes Pk.—Rust (OS)

Lycopersicon esculentum Mill. Tomato

BACTERIA

Corynebacterium michiganense pv. *michiganense* (E.F. Sm.) Jens.—Bacterial canker (C, RCR) CMI 19. See Davis 1986
Erwinia carotovora (L.R. Jones) Holland pv. *carotovora* (L.R. Jones) Bergey et al.—Soft rot (RCR; OCES Bull. SB-10)
Pseudomonas solanacearum E.F. Sm.—Southern bacterial wilt (C; OAES Bull. 321) CMI 15
P. syringae pv. *tomato* (Okabe) Young, Dye, & Wilkie—Bacterial speck (C, RCR)
Xanthomonas campestris pv. *vesicatoria* (Doidge) Dye—Bacterial spot (C) CMI 20

FUNGI

- Alternaria solani* (Ell. & G. Mart.) Sor.—Early blight and fruit rot (OS) Ellis 1971
Botrytis cinerea Pers.—Gray mold, stem canker & fruit rot; ghost spot of fruit (C; OCES Bull. 674)
Cladosporium fulvum Cke. [*Fulvia fulva* (Cke.) Cif.]—Leaf mold (OS) Walker 1952; CMI 487
Colletotrichum coccodes (Wallr.) Hughes [*C. atramentarium* (Berk. & Br.) Tauben., Peri. St. *Glomerella*]—Anthracnose fruit rot (C, CWE) Arx 1970; Swank, M.Sc. Thesis, OSU 1948
Fusarium oxysporum Schlecht.—Vascular wilt (C, CWE, RMR)
F. oxysporum Schlecht. f. sp. *radicis-lycopersici*—Crown and root rot (Sherf and MacNab 1986; Phytopath. 70:1143)
Myrothecium roridum Tode ex Fr.—Ring rot of fruit (PDI) CMI 253
Phoma destructiva Plowr.—Fruit rot (OS) Sutton 1980; Mycotaxon 32:133 and 253
Phytophthora infestans (Mont.) dBy.—Late blight, fruit rot (C, OS) *P. parasitica* Dast.—Buckeye rot (C) CMI 35
Pythium debaryanum Hesse—Damping-off (USDA Dept. Bull. 1366) Not now considered a valid species. See Plaats-Niterink 1981
P. ultimum Trow—Damping-off (OAES Bull. 496; AFS)
Rhizoctonia solani Kuehn—Damping-off; stem and fruit rot (CWE; OAES Bull. 496; OCES Bull. 674)
Rhizopus stolonifer (Ehr. ex Fr.) Vuill.—Fruit rot (RCR) Mycologia 47:344; CMI 110, 524
Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot (CWE, RCR) Mycotaxon 9:365; CMI 513
Septoria lycopersici Speg.—Leaf spot (C, OS) Walker 1952; CMI 89
Stemphylium solani Weber—Gray leaf spot (C) Ellis 1971; CMI 472
Trichothecium roseum Link ex Fr.—Fruit rot (Phytopath. 41:633) Plant Dis. Rptr. 59:255
Verticillium dahliae Kleb.—Wilt (C, RCR) CMI 255, 256
V. tricornis Isaac—Weak pathogen (RCR) CMI 260

NEMATODES

- Meloidogyne hapla* Chitwood—Root knot (RMR)
M. incognita (Kofoid & White) Chitwood—Root knot on glasshouse tomatoes (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

- Cucumber mosaic virus—Mosaic, leaf and fruit malformations (OCES Bull. 674) CMI/AAB No. 213
 Potato virus x plus tobacco mosaic virus—Double virus streak; fruit, leaf, and stem lesions (Ibid.)
 Tobacco etch virus—Etch (Plant Dis. Rptr. 35:351) CMI/AAB 258
 Tobacco mosaic virus—Mosaic and leaf malformations (OCES Bull. 674) Phytopath. 61:611; CMI/AAB No. 151
 Tobacco mosaic virus + cucumber virus—Fruit malformations and stunting (Ibid.)
 Spotted wilt virus—Spotted wilt (PDI; OCES Bull. 674) CMI/AAB No. 39

ABIOTIC

- Calcium deficiency, imbalance of soil moisture—Blossom-end rot (C)
 High temperature—Fruit scald (CWE; C)
 Physiological—Leaf roll (CWE)
 Juglone toxicity—Walnut wilt (C) W. Va. Agr. Exp. Sta. Bull. 347; Rice 1984
 Herbicides, especially phenoxy—Leaf malformations (CWE)
 Unknown; ? physiological—Blotchy ripening, gray, wall, internal browning (OCES Bull. 674)

Nicotiana tabacum L. Tobacco

BACTERIA

- Corynebacterium fascians* (Tilford) Dowson—Fasciation (PDI) CMI 121
Pseudomonas angulata (Fromme & Murray) Holland—Angular leaf spot (Plant Dis. Rptr. 15:155) A synonym of the next species
P. syringae pv. *tabaci* (Wolf & Foster) Young et al.—Wildfire (OS)
P. solanacearum E.F. Sm.—Bacterial wilt (Plant Dis. Rptr. Sup. 80)

FUNGI

- Alternaria longipes* (Ell. & Ev.) Mason—Brown spot (OS) Mycotaxon 13:16 (*A. tabacina* Ell. & Ev. considered by some as a synonym)
Cercospora nicotianae Ell. & Ev.—Leaf spot (PDI; Chupp 1953)
Fusarium oxysporum Schlecht.—Wilt (OS; J. Agr. Res. 20:515-536; C)

- Peronospora tabacina* Adam—Blue mold, downy mildew (OS) Spencer 1981
Phytophthora parasitica var. *nicotianae* (B. deH.) Tucker—Black shank CCA, LJH) CMI 34
Pythium debaryanum Hesse—Damping-off (PDI) Not now considered a valid species. See Plaats-Niterink 1981
P. ultimum Trow—Damping-off (OAES Bull. 496)
Rhizoctonia solani Kuehn—Sore-shin, damping-off (OAES Bull. 156)
Thielaviopsis basicola (Berk. & Br.) Ferr.—Black root rot (OAES Bull. 156 and 214) Phytopath. 25:1011; CMI 170

PARASITIC SEED PLANTS

- Orbanche ramosa* L. Broomrape (OS; OAES Bull. 156) Annu. Rev. Phytopathol. 18:463

NEMATODES

- Meloidogyne hapla* Chitwood—Root knot (PDI)

VIRUSES, VIROIDS, MYCOPLASMAS

- Tobacco etch virus—Etch (PDI) CMI/AAB No. 258
 Tobacco mosaic virus—Mosaic (PDI) CMI/AAB No. 151
 Tobacco streak virus—Streak (PDI) CMI/AAB No. 44

Petunia x hybrida Hort. Vilm. Andr. Garden petunia

BACTERIA

- Corynebacterium fascians* (Tilford) Dows.—Fasciation (OS, CWE) J. Agr. Res. 53:383

FUNGI

- Botrytis cinerea* Pers.—Gray mold flower blight (CWE)
Oidium sp.—Powdery mildew (CWE)
Phytophthora parasitica Dast.—Root and crown rot (C, CWE) CMI 35
Rhizoctonia solani Kuehn—Root rot, seedling blight (Stephens, M.Sc. Thesis, OSU 1977)
Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot and wilt (OS, CWE, C) CMI 513
Verticillium albo-atrum Reinke & Berth.—Wilt (C)

Physalis sp. Ground cherry

FUNGI

- Cercospora diffusa* Ell. & Ev.—Leaf spot (OS)

P. alkekengi L. Chinese lantern

NEMATODES

- Meloidogyne hapla* Chitwood—Root knot (Baringer 1930-34)

P. heterophylla Nees Ground cherry

FUNGI

- Entyloma australe* Speg.—White leaf smut (OS)

P. pubescens L.

FUNGI

- Cercospora physalidis* Ell.—Leaf spot (OC)

Solanum carolinense L. Horse nettle

FUNGI

- Erysiphe cichoracearum* DC.—Powdery mildew (CWE)
Phyllosticta sp.—Leaf spot (PDI)

VIRUSES, VIROIDS, MYCOPLASMAS

- Virus—Virus-like symptoms (mosaic) reported (PDI)

S. dulcamara L. Nightshade

FUNGI

- Ascochyta lycopersici* Brun. (*Phoma exigua* Desm.)—Leaf spot (OS) Neth. J. Plant Path. 78:113
Mycosphaerella solani (Ell. & Ev.) Wr.—Leaf spot (PDI)

***S. melongena* L. Eggplant**

FUNGI

- Alternaria solani* (Ell. & Martin) Sor.—Early blight, leaf spot (OS) Ellis 1971
Gloeosporium melongenae Ell. & Halst. (*Colletotrichum* state of *Glomerella cingulata*)—Anthracnose fruit rot (OAES Bull. 214) Arx 1970
Phomopsis vexans (Sacc. & Syd.) Harter—Fruit rot (OS) Walker 1952
Rhizoctonia solani Kuehn—Damping-off and stem rot (PDI)
Verticillium albo-atrum Reinke & Berth.—Wilt (C) Walker 1952; CMI 255, 256

VIRUSES, VIROIDS, MYCOPLASMAS

- Virus (?)—Mosaic (CWE)

***S. nigrum* L. Black nightshade**

VIRUSES, VIROIDS, MYCOPLASMAS

- Tobacco-mosaic virus—Mosaic (PDI)

***Solanum tuberosum* L. Potato. General references—Compendium of Potato Diseases 1981. American Phytopathological Society; USDA Agr. Handbook 474.**

BACTERIA

- Corynebacterium michiganense* (E.F. Sm.) Jens. pv. *sepedonicum* (Spieck. & Kotth.) Dye & Kemp —Bacterial ring rot (OAES Bull. 615) OCES Bull. 734
Erwinia carotovora (L.R. Jones) Holland pv. *atroseptica* (vanHall) Dye—Black leg (OAES Bull. 615) OCES Bull. 734
E. carotovora (L.R. Jones) Holland pv. *carotovora* (L.R. Jones) Bergey et al.—Soft rot (OAES Bull. 615) OCES Bull. 734
Pseudomonas solanacearum E.F. Sm.—Southern bacterial wilt (USDA Yearbook of Agriculture 1906; PDI)
Streptomyces scabies (Thaxt.) Waks. & Henrici—Common scab (OS; OAES Bull. 615)

FUNGI

- Alternaria solani* (Ell. & G. Mart.) Sor.—Early blight (OS) Ellis 1971
Botrytis cinerea Pers.—Gray mold rot (RCR)
Colletotrichum coccodes (Wallr.) Hughes [*C. atramentarium* (Berk. & Br.) Taub.]—Black dot (RCR, RMR)
Erysiphe cichoracearum DC.—Powdery mildew (RCR; Plant Dis. Rptr. 59:330)
Fusarium spp.—Seed piece decay (RCR)
F. oxysporum Schlecht.—Wilt and stem rot (PDI, C)
F. solani (Mart.) Sacc.—Wilt and tuber rot (PDI)
F. trichothecioides Wollenw. (*F. sambucinum* Fckl.)—Tuber rot (PDI, RCR)
Phytophthora cryptogea Pethyb. & Laff.—Pink rot (RCR; Plant Dis. Rptr. 61:807) CMI 592
P. erythroseptica Pethyb.—Pink rot (RCR) CMI 593
P. infestans (Mont.) dBy.—Late blight (OS, C)
Pythium spp.—Seed piece decay (RCR)
Pythium ultimum Trow—Leak (RCR, AFS)
Rhizoctonia solani Kuehn—Black scurf and stem canker (C, RCR)
Rhizopus sp.—Tuber rot (PDI; Plant Dis. Rptr. Sup. 22; RCR)
Spondylocidium atrovirens Harz. (*Helminthosporium solani* Dur. & Mont.)—Silver scurf (C) Fungi Canadenses No. 236
Spongopora subterranea (Wallr.) Lagerh.—Powdery scab (OS; OAES Bull. 615)
Verticillium dahliae Kleb.—Wilt (RMR, RCR) CMI 255, 256; Phytopath. 75:412; Plant Dis. 71:482

NEMATODES

- Meloidogyne hapla* Chitwood—Root knot (RMR)
Pratylenchus alleni Ferris—Lesion nematode (J. Nematol. 12:189)
P. crenatus Loof—Lesion nematode (Ibid.)
P. neglectus (Rensch) Filipjev & Stekhoven—Lesion nematode (Ibid.)
P. penetrans (Cobb) Filipjev & Stekhoven—Lesion nematode (Ibid.)
P. scribneri Steiner—Lesion nematode (Ibid.)
P. thornei Sher & Allen—Lesion nematode (Ibid.)

VIRUSES, VIROIDS, MYCOPLASMAS

- Potato leaf roll virus—Leaf roll and net necrosis (OAES Bull. 615) CMI/AAB 291
Potato virus A—Mild mosaic (Ibid.) CMI/AAB 54
Potato virus Y—Rugose mosaic (Ibid.)
Potato yellow dwarf virus—Yellow dwarf (Ibid.) CMI/AAB 35
Mycoplasma—Purple-top wilt (RCR)
Viroid—Spindle tuber (OAES Bull. 615) Diener 1987

INSECTS, MITES

- Empoasca fabae* (Harris)—Hopperburn (CWE; OAES Bull. 615)

ABIOTIC

- Air pollutants-photochemical oxidants—Leaf stippling and glazing (RCR)
Environmental—Hollow heart (OCES Bull. 734)
Growing conditions—Internal necrosis of tubers (Ibid.)
Oxygen deficiency—Blackheart in storage (Ibid.)

SPARAGANIACEAE

***Sparganium eurycarpum* Engelm. Bur-reed**

FUNGI

- Uromyces sparganii* Cke. & Pk.—Rust (OS)

STAPHYLEACEAE

***Staphylea trifoliata* L. Bladdernut**

- No pathogens identified from Ohio

STYRACACEAE

***Halesia carolina* L. Silverbell**

- No pathogens identified from Ohio

ABIOTIC

- Iron deficiency—Chlorosis (E.M. Smith, OARDC Res. Cir. 263)

TAMARICACEAE

***Tamarix* sp. Tamarisk**

FUNGI

- Schizophyllum commune* (Fr.) Fr.—Wood rot (CWE) Miller 1972; Mycologia 53:575

TAXACEAE

***Taxus cuspidata* Siebold & Zucc. Japanese yew**

***Taxus x media* Rehd. (*T. baccata* x *T. cuspidata*)**

- Most of the plantings of yew in Ohio are cultivars of these two taxa. Much of the decline of *Taxus* in the landscape is caused by an insect pest (black vine weevil) or due to planting site problems.

FUNGI

- Pestalotia* sp. (*Pestalotiopsis*)—On senescing tissues (CWE)
Phytophthora citrophthora (Sm. & Sm.) Leonian—Root and crown rot (Phytopath. 66:309) CMI 33
Pythium irregulare Buis.—From roots (AFS)
P. mamillatum Meurs.—From roots (AFS) CMI 117
Sclerotium rolfsii Sacc.—Cutting rot (C) N. Car. Agr. Exp. Tech. Bull. 174

ABIOTIC

- Boron toxicity—Needle tip necrosis (See OCES Bull. 658)

TAXODIACEAE

***Metasequoia glyptostroboides* H.H. Hu & Cheng**
Dawn redwood

FUNGI

Botryosphaeria sp.—Associated with dieback (C)

THEACEAE

***Camellia japonica* L. Common camellia**

FUNGI

Glomerella cingulata (Stonem.) Spauld. & Schrenk —Canker (New Jersey Nurs. Disease Notes 14:32) *Mycologia* 46:52

THYMELAEACEAE

***Dirca palustris* L. Leatherwood**

FUNGI

Puccinia extensicola Plowr. var. *hydnoidea* (Berk. & Curt.) Arthur—Rust (OS)

TILIACEAE

***Tilia americana* L. Basswood**

FUNGI

Cercospora microsora Sacc.—Leaf spot (OC)

Cristulariella moricola (Hino) Redhead (Perf. St. *Grovesinia pyramidalis* Cline et al.)—Zonate leaf spot (OS, CWE) *Mycologia* 71:722 and 75:988

Gloeosporium tiliae Oud. [*Discula* sp.; Perf. St. *Apiognomonia tiliae* (Rehm) v. Hohnel]—Leaf blight (CWE) Barr 1978; Arx 1970

Schizophyllum commune (Fr.) Fr.—Wood rot (WBC) Miller 1972; *Mycologia* 53:575

Uncinula clintonii Pk.—Powdery mildew (OS)

Verticillium albo-atrum Reinke & Berth.—Wilt (C) CMI 255, 256

***Tilia* spp. The species and cultivars of *Tilia* (linden) planted in the landscapae in Ohio have been relatively free of bacterial and fungus-caused diseases.**

Sootymold fungi—Sooty molds on leaves—saprophytes growing on exudates of scale and aphid infestation.

TYPHACEAE

***Typha* sp. Cat-tail**

FUNGI

Colletotrichum sp.—Leaf spot (CWE; OS)

ULMACEAE

***Celtis occidentalis* L. Hackberry**

FUNGI

Cristulariella moricola (Hino) Redhead (*C. pyramidalis* Waterman & Marshall; Perf. St. *Grovesinia*)—Zonate leaf spot (OS, CWE) *Mycologia* 75:988

Phyllosticta celtidis Ell. & Kell.—Leaf spot (PDI)

Polyporus robinophilus (Murr.) Lloyd—Heart rot (CWE) Overholts 1953

Septoria sp.—Leaf spot (ODA) Probably *Phloeospora celtidis* Ell. & Morg.

Sphaerotheca phytophila Kell. & Swingle—Powdery mildew, associated with witches'-broom (CWE) USDA Agr. Handbook 573; Pl. Dis. Rptr. 41:541

Uncinula parvula Cke. & Pk.—Powdery mildew (OS)

INSECTS, MITES

Eriophyid mites—Leaf galls or erineum; patches of proliferated tissue (CWE)

***Ulmus* sp. Elm**

FUNGI

Cristulariella moricola (Hino) Redhead —Zonate leaf spot (CWE) See *Celtis*

PARASITIC SEED PLANTS

Phoradendron sp.—Mistletoe (CWE) Brittonia 16:11-54

***U. americana* L. American elm. General reference—Compendium of Elm Diseases. 1981. American Phytopathological Society.**

BACTERIA

Enterobacter cloacae (Jordan) Hormaeche & Edwards (*Erwinia nimipressuralis*)—Bacterial wetwood (CWE) Species of *Bacillus* and *Pseudomonas* are also reported to be present. *Phytopath.* 73:1270

FUNGI

Aleurodiscus griseo-canus (Bres.) Hoehn. & Litsch. [*Dendrothele g.* (Bres.) Bourd. & Galz.]—Bark patch (*Mycologia* 65:197)

Ceratocystis—See *Ophiostoma*

Dothiorella ulmi Verrall & May—Canker and wilt (OAES Bull. 497)

Flamulina velutipes (Fr.) Karst.—Wood rot, common on dead and dying elms (CWE) Miller 1972

Ganoderma applanatum (Pers. ex Wallr.) Pat.—Heart rot (PDI) Overholts 1953

G. curtisii (Berk.) Murr. (*Polyporus c.*)—Wood rot (PDI) Ibid.

Gloeosporium inconspicuum Cav. [*Cylindrosporella inconspicua* (Cav.) Arx]—Leaf spot (Pl. Dis. Rptr. Sup. 29) Sutton 1980; Arx 1970

G. ulmeum Miles [*Cylindrosporella ulmea* (Miles) Arx; Perf. St. *Gnomonia ulmea* (Schw.) Thum.]—Black leaf spot (OS, C, CWE) Hepting 1971; Arx 1970. *Lambro ulmea* and *Stegophora ulmea* are other names for the perfect state. See *Phytopath.* 74:1300

Microsphaera penicillata (Wallr.) Fr.—Powdery mildew (PDI)

Ophiostoma ulmi (Buis.) Nannf. [*Ceratocystis ulmi* (Buis.) Moreau; Imp. St. *Pesotum ulmi* (Schwarz.) Crane & Schoknecht]—Dutch elm disease (OS; Science 72:142; May, Ph.D. Dissertat. OSU 1935) CMI 361

Phyllactinia guttata (Wallr.) Lev.—Powdery mildew (Ohio J. Sci. 66:570)

Pleurotus ulmarius (Bull. ex Fr.) Kummer—White spongy rot (PDI)

Polyporus conchifer (Schw.) Fr.—On dead twigs (PDI, CWE)

P. frondosus (Dickson ex Fr.) Karst. (*Grifola f.*)—Wood rot (PDI)

P. spumeus Sow. ex Fr. (*Spongipellis s.*)—Wound rot (PDI)

P. squamosus Mich. ex Fr.—White mottled rot (PDI) See Overholts 1953 for descriptions of the *Polyporus* species.

Schizophyllum commune Fr.—Wood rot (CWE) *Mycologia* 53:575

Uncinula macrospora Pk.—Powdery mildew (OS; Ohio J. Sci. 66:570)

Verticillium albo-atrum Reinke & Berth.—Wilt (C; OAES Bull. 497) CMI 255, 256

V. rhizophagum Tehon—Isolated from roots; saprophytic (Hepting 1971)

VIRUSES, VIROIDS, MYCOPLASMAS

Mycoplasma-like organism (MLO)—Phloem necrosis, yellows (*Phytopath.* 28:757; McLean, Ph.D. Dissertat. OSU 1943)

Mosaic virus—Elm mosaic (*Phytopath.* 31:22)

Graft transmissible agent (? virus)—Zonate canker (*Phytopath.* 40:1018)

***U. parvifolia* Jacq. Chinese elm; lacebark elm**

FUNGI

Gloeosporium ulmeum Miles—Black leaf spot (CWE) See *U. americana*

***U. procera* Salisb. English elm**

FUNGI

Ophiostoma ulmi (Buis.) Nannf.—Dutch elm disease (C, CWE) See *U. americana* and APS Compendium

***U. pumila* L. Siberian elm**

BACTERIA

Enterobacter cloacae (Jordan) Hormaeche & Edwards—Bacterial wet-wood (CWE) See APS Compendium and Phytopath. 73:1270

FUNGI

Gloeosporium ulmeum Miles—Black leaf spot (OS) See *U. americana*
Ophiostoma ulmi (Buis.) Nannf.—Dutch elm disease (USDA Res. Lab. Delaware, OH) Resistant; see *U. americana*

***U. rubra* Muhl. Red or slippery elm**

FUNGI

Coniothyrium sp.—Leaf spot (OS)
Corticium vellereum Ell. & Cragin.—Wood decay (FB)
Gloeosporium ulmeum Miles (See *U. americana*) —Black leaf spot (CWE)
Ophiostoma ulmi (Buis.) Nannf.—Dutch elm disease (C) See *U. americana*
Uncinula macrospora Pk.—Powdery mildew (Ohio J. Sci. 66:570)

VIRUSES, VIROIDS, MYCOPLASMAS

Mycoplasmal-like organism (MLO)—Phloem necrosis, yellows (USDA Res. Lab. Delaware OH) See *U. americana*

***Zelkova serrata* (Thunb.) Mak. Zelkova**

FUNGI

Nectria sp.—Canker (ODA, PK)

UMBELLIFERAE

***Aegopodium podagraria* L. Goutweed**

FUNGI

Septoria sp.—Leaf blight (CWE)—may be *Phloeospora*, the imperfect state of *Mycosphaerella podagrariae* (Fr.) Petrak.

***Anethum graveolens* L. Dill**

FUNGI

Fusarium oxysporum Schlecht.—Wilt (Phytopath. 42:152)

***Angelica atropurpurea* L. Angelica**

FUNGI

Phyllosticta angelicae Sacc.—Leaf spot (OS)

***Apium graveolens* L. Celery See Walker 1952; Sherf and MacNab 1986**

BACTERIA

Erwinia carotovora (L.R. Jones) Holland—Soft rot (Plant Dis. Rptr. Sup. 3)
Pseudomonas syringae pv. *apii* (Jagger) Young et al.—Bacterial leaf spot (OS; OAES Bull. 461) J. Agr. Res. 49:493-516

FUNGI

Cephalosporium apii Smith & Ramsey—Brown spot (USDA Yearbook Agric. 1953) Bot. Gaz. 112:394. Status of this report uncertain. Sherf and MacNab 1986; CMI 932 as *Acremonium apii*
Cercospora apii Fres.—Early blight (OS; OAES Bull. 461)
Fusarium oxysporum Schlecht. f. *apii* (R. Nelson & Sherb.) Snyder & Hans.—Yellows, wilt (OAES Bimonth. Bull. 19:109-115 and 25:715)
Fusarium spp.—Associated with root rot (Monthly Bull. OAES 9:88)
Phoma apiicola Kleb.—Root and crown rot (USDA Misc. Pub. 440, 1941; OAES Cir. 72, 1907) Sherf & MacNab 1986
Pythium ultimum Trow—Damping off, root rot (OAES Bull. 496)
Rhizoctonia solani Kuehn—Root rot, damping-off (OAES Bull. 496)
Sclerotinia sclerotiorum (Lib.) dBy.—Cottony rot, pink rot (Plant Dis. Rptr. Sup. 26) Walker 1952
Septoria apii (Briosi & Cav.) Chester—Late blight (OS; OAES Bull. 461) Walker 1952
S. apii-graveolentis Dorogin—Late blight (OS) Phytopath. 54:1251-1257.
Septoria apiicola Speg. now used for both species (CMI 88)

NEMATODES

Meloidogyne hapla Chitwood, 1949—Root knot (RMR) OAES Bull. 451

VIRUSES, VIROIDS, MYCOPLASMAS

Aster yellows mycoplasma—Aster yellows (RCR)

***Chaerophyllum procumbens* (L.) Crantz Spreading chervil**

FUNGI

Puccinia pimpinellae (Str.) Roehling—Rust (OS)

***Cryptotaenia canadensis* (L.) DC. Honewort**

FUNGI

Septoria cryptotaeniae Ell. & Rau—Leaf spot (OS)

***Daucus carota* L. Carrot**

BACTERIA

Erwinia carotovora (L.R. Jones) Holland—Soft rot (PDI)

FUNGI

Alternaria dauci (Kuhn) Groves & Skolko—Leaf blight (OS) Ellis 1971
A. radicina Meier, Drechs., & Eddy—On leaves (Mycologia 65:192) Ellis 1971; CMI 346
Botrytis cinerea Pers.—Gray mold storage rot (PDI) Cornell Univ. Agr. Exp. Sta. Bull. 889
Cercospora carotae (Pass.) Solh.—Leaf spot (OS)
Pythium irregulare Buis.—Seedling blight (AFS)
P. ultimum Trow—Seedling blight (AFS)
Rhizoctonia solani Kuehn—Root rot (C) Cornell Univ. Agr. Exp. Sta. Bull. 889
Rhizopus sp.—Black-mold storage rot (PDI)
Sclerotinia sclerotiorum (Lib.) dBy.—Watery soft rot (Plant Dis. Rptr. Sup. 16) Mycotaxon 9:365
Sclerotium rolfsii Sacc. (Perf. St. *Athelia*)—Cottony rot, Southern blight (C) North Car. Agr. Exp. Sta. Tech. Bull. 174; CMI 410

NEMATODES

Meloidogyne hapla Chitwood, 1949—Root knot nematode (RMR)
Pratylenchus penetrans (Cobb) Filipjev & Stekhoven —Lesion nematode (RMR)

VIRUSES, VIROIDS, MYCOPLASMAS

Aster yellows mycoplasma—Yellows (RCR)

***Erigenia bulbosa* (Michx.) Nutt. Harbinger-of-spring**

FUNGI

Puccinia erigeniae (Orton) Arth.—Rust (OS; CWE)

***Heracleum maximum* Bartr. Cow-parsnip**

FUNGI

Ramularia heraclei (Oud.) Sacc.—Leaf spot (OS) Hedwigia 73:114

***Osmorhiza* sp.**

FUNGI

Ceratobasidium anceps (Bres. & Syd.) Jacks. (Imp. St. *Sclerotium*)—Stem and leaf necrosis (CWE) Can. J. Res. Sect. C. 27:241

***Osmorhiza claytoni* (Michx.) C.B. Clarke Sweet Cicely**

FUNGI

Cercospora osmorrhizae Ell. & Ev.—Leaf spot (Ohio Nat. 13:36)
Puccinia pimpinellae (Str.) Roehling—Rust (OS)
Septoria aegopodii Desm.—Leaf spot (OS)

***O. longistylis* (Torr.) DC.**

FUNGI

Cercospora osmorrhizae Ell. & Ev.—Leaf spot (PDI)
Phloeospora osmorrhizae (Pk.) House—Leaf spot (OS)
Puccinia pimpinellae (Str.) Roehling—Rust (OS)
Septoria aegopodii Desm.—Leaf spot (OS)

Pastinaca sativa L. Parsnip

FUNGI

Cercospora pastinacae (Sacc.) Pk.—Leaf spot (OS)
Ramularia pastinacae (Karst.) Lindr. (*Cercospora pastinacae* Karst.)—Leaf spot (OS) See Chupp, 1950 for comments on these species.

NEMATODES

Meloidogyne sp.—Root knot (OAES Bull. 451)

Petroselinum crispum (Mill.) Mansf. Parsley

FUNGI

Sclerotinia sclerotiorum (Lib.) dBy.—Stem rot (C)
Septoria petroselini Desm.—Leaf spot (CWE, OS) Ellis & Ellis 1985

NEMATODES

Meloidogyne hapla Chitwood—Root knot nematode (RMR)

Sanicula sp.

FUNGI

Puccinia marylandica Lindr.—Rust (OS)

S. canadensis L. Black snakeroot

FUNGI

Entyloma eryngii (Cda.) dBy.—White leaf smut (Ohio J. Sci. 59:313)

Thaspium barbinode (Michx.) Nutt. Meadow parsnip

FUNGI

Cercospora thaspii Ell. & Ev.—Leaf spot (CWE)

URTICACEAE

Parietaria pennsylvanica Muhl. Pellitory

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

Pilea cadierei Gagnep. & Guillaum. Artillery plant

FUNGI

Oidium sp.—Powdery mildew (CWE)

P. pumila (L.) Gray Clearweed

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)
Septoria pileae Thuem.—Leaf spot (OS)

Urtica sp. Nettle

FUNGI

Septoria urticae Rob. ex Desm.—Leaf spot (5th Ann. Rpt. Ohio Acad. Sci.)

U. dioica L. Stinging nettle

FUNGI

Puccinia caricina DC.—Rust (OS)
Ramularia urticae Rob. ex Desm.—Leaf spot (OS)

VALERIANACEAE

Valeriana pauciflora Michx. Valerian

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CINC)

Valerianella intermedia Dyal Corn salad

FUNGI

Septoria ?valerianella Miles—Leaf spot (OS, CWE)

VERBENACEAE

Caryopteris incana (Thunb.) Miq. Bluebeard

BACTERIA

Agrobacterium tumefaciens (E.F. Sm. & Towns.) Conn—Crown gall (CWE)

NEMATODES

Meloidogyne hapla Chitwood—Root knot (JDW) Plant Dis. Rptr. 46:186

Lippia lanceolata Michx. Fogfruit

FUNGI

Cercospora lippiae Ell. & Ev.—Leaf spot (OS)

Verbena sp. Verbena or vervain

FUNGI

Sclerotinia sclerotiorum (Lib.) dBy.—Stem or crown rot (ODA) Mycotaxon 9:365
Septoria verbenae Rob. ex Desm.—Leaf spot (Rpt. Geol. Survey Ohio, Vol. 7, 1893)

V. hastata L. Blue verbena

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

V. x hybrida Voss. Garden verbena

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (CWE; Ohio J. Sci. 66:570)
Pythium sp.—Damping-off (C)

V. simplex Lehm.

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

V. urticifolia L. White verbena

FUNGI

Erysiphe cichoracearum DC.—Powdery mildew (OS)

VIOLACEAE

Viola sp.

FUNGI

Alternaria violae Gall. & Dorsett—Leaf spot (MU) Ellis & Ellis 1985
Cercospora granuliformis Ell. & Holw.—Leaf spot (OS)
C. murina Ell. & Kell.—Leaf spot (Chupp 1953)
C. violae Sacc.—Leaf spot (OS)
Phyllosticta violae Desm.—Leaf spot (CWE)
Sphaceloma violae Jenkins—Spot anthracnose (C)
Thielaviopsis basicola (Berk. & Br.) Ferr.—Root rot (OAES Bull. 214)

NEMATODES

Meloidogyne sp.—Root knot (PDI)

V. blanda Willd. Sweet white violet

FUNGI

Sphaerotheca sp.—Powdery mildew (OS)

V. canadensis L. Canada violet

FUNGI

Puccinia violae (Schum.) DC.—Rust (OS)

V. cucullata Ait. Marsh blue violet

FUNGI

Puccinia violae (Schum.) DC.—Rust (OS)

V. hastata Michx.

FUNGI

Puccinia violae (Schum.) DC.—Rust (Arthur 1934)

Septoria violae West.—Leaf spot (Rpt. Geol. Survey Ohio V. 7, 1893)

V. incognita Brain.

FUNGI

Puccinia violae (Schum.) DC.—Rust (OS)

V. odorata L. Florist's violet

FUNGI

Botrytis cinerea Pers.—Gray mold blight (PDI)

Fusarium sp.—Root rot (PDI)

V. palmata L.

FUNGI

Puccinia violae (Schum.) DC.—Rust (OS)

V. papilionacea Pursh Common blue violet

FUNGI

Colletotrichum sp.—Leaf spot (CWE)

Puccinia violae (Schum.) DC.—Rust (OC)

V. pennsylvanica Michx. Smooth yellow violet

FUNGI

Puccinia violae (Schum.) DC.—Rust (OS)

V. pubescens Ait. Downy yellow violet

FUNGI

Puccinia violae (Schum.) DC.—Rust (OS)

Septoria violae West.—Leaf spot (OS)

V. rostrata Pursh Long-spurred violet

FUNGI

Puccinia violae (Schum.) DC.—Rust (OS)

V. striata Ait. Striped white violet

FUNGI

Puccinia violae (Schum.) DC.—Rust (OS)

V. tricolor L. Johnny-jump-up

FUNGI

Cercospora violae Sacc.—Leaf spot (CWE)

V. x wittrockiana Gams Garden pansy

FUNGI

Botrytis cinerea Pers.—Flower blight (CWE, OS)

Cercospora violae Sacc.—Leaf spot (CWE)

Mycocentrospora acerina (Hartig) Deighton—Leaf spot (C) CMI 537

Oidium sp.—Powdery mildew (CWE)

Sphaceloma violae Jenkins—Spot anthracnose (C)

Puccinia sp.—Rust (CWE)

Pythium ultimum Trow—Damping-off (C, AFS)

Thielaviopsis basicola (Berk. & Br.) Ferr.—Root rot (C, NJT)

VITACEAE

Cissus rhombifolia Vahl Grape ivy

FUNGI

Oidium sp.—Powdery mildew (CWE)

Pythium sp.—From roots (C)

Parthenocissus quinquefolia (L.) Planch. Virginia creeper

FUNGI

Cercospora ampelopsidis Pk.—Leaf spot (OS)

Guignardia bidwellii (Ell.) Viala & Ravaz (Imp. St. *Phyllosticta*)—Leaf spot (OS, C) CMI 710

Plasmopara viticola (Berk. & Curt.) Berl. & deToni—Downy mildew (OS, C)

Uncinula necator (Schw.) Burr.—Powdery mildew (Ohio J. Sci. 66:570)

P. tricuspidata (Sieb. & Zucc.) Planch. Boston ivy

FUNGI

Guignardia bidwellii (Ell.) Viala & Ravaz—Leaf spot (CWE, OS) CMI 710

Vitis aestivalis Michx. Summer grape

FUNGI

Guignardia bidwellii (Ell.) Viala & Ravaz (Imp. St. *Phyllosticta*)—Leaf spot and black rot (OS)

Plasmopara viticola (Berk. & Curt.) Berl. & deToni—Downy mildew (OS)

Vitis labrusca L. American vineyard grape. General reference Compendium of Grape Diseases. 1988. American Phytopathological Society.

BACTERIA

Agrobacterium tumefaciens (E.F. Smith & Towns.) Conn—Crown gall (Ohio J. Sci. 58:145)

FUNGI

Botrytis cinerea Pers.—Gray mold fruit rot (PDI, MAE) Coley-Smith et al. 1980

Coniothyrium diplodiella (Speg.) Petrak & H. Syd.—White rot (OAES Bull. 123) CMI 82

Eutypa armeniacae Hansf. & Carter—Dieback (MAE) CMI 436

Guignardia bidwellii (Ell.) Viala & Ravaz (Imp. St. *Phyllosticta*)—Black rot, leaf spot (OS, MAE) Anderson 1956; CMI 710

Melanconium fuligineum (Scribner & Viala) Cav.—Bitter rot (MAE) Mycologia 44:141. See APS Compendium for recent nomenclature

Penicillium sp.—Blue mold fruit rot (Plant Dis. Rptr. Sup. 14)

Phomopsis viticola (Sacc.) Sacc. (*Fusicoccum* v.)—Cane and leaf spot; "dead-arm" (MAE) CMI 635; Cornell Univ. Agr. Exp. Sta. Bull. 263

Plasmopara viticola (Berk. & Curt.) Berl. & deToni—Downy mildew (OS) Anderson 1956; Spencer 1981

Rosellinia necatrix Prill. (Imp. St. *Dermatophora* n.)—White root rot (PDI) CMI 352

Sphaceloma ampelinum dBy. (Perf. St. *Elsinoe*)—Anthracnose, leaf spot, fruit rot (Anderson 1956) CMI 439

Uncinula necator (Schw.) Burr.—Powdery mildew (OS) Spencer 1981

ABIOTIC

Herbicide (phenoxy) injury—Leaf malformations (CWE) Symptoms in part similar to those caused by grape fanleaf virus and other viruses. These viruses not reported in Ohio.

INSECTS, MITES

Phylloxera vitifolia (Fitch)—Leaf galls caused by an insect and sometimes mistaken for disease

V. riparia Michx. Riverside grape

FUNGI

Guignardia bidwellii (Ell.) Viala & Ravaz —Black rot and leaf spot (OS)

Plasmopara viticola (Berk. & Curt.) Berl. & deToni—Downy mildew (OS)

Uncinula necator (Schw.) Burr.—Powdery mildew (OS)

V. vinifera L. European wine grape. General reference Compendium of Grape Diseases. 1988. American Phytopathological Society.

BACTERIA

Agrobacterium tumefaciens (E.F. Smith & Towns.) Conn.—Crown gall (MAE)

FUNGI

Botrytis cinerea Pers.—Fruit rot (MAE) Coley-Smith et al. 1980
Eutypa armeniacae Hansf. & Carter—Dieback (MAE) CMI 436
Guignardia bidwellii (Ell.) Viala & Ravaz—Black rot; leaf spot and fruit rot (MAE) Anderson 1956
Melanconium fuligineum (Scrib. & Viala) Cav.—Bitter rot (MAE) Mycologia 44:141. See APS Compendium for recent nomenclature.

Phomopsis viticola (Sacc.) Sacc. (*Fusicoccum v.*)—Cane and leaf spot; "dead-arm" (MAE) CMI 635; Cornell Univ. Agr. Exp. Sta. Bull. 263

Plasmopara viticola (Berk. & Curt.) Berl. & deToni—Downy mildew (MAE)

Uncinula necator (Schw.) Burr.—Powdery mildew (MAE)

V. vulpina L. Frost grape

FUNGI

Guignardia bidwellii (Ell.) Viala & Rav. (Imp. St. *Phyllosticta*)—Leaf spot and black rot (OS)

Plasmopara viticola (Berk. & Curt.) Berl. & deToni—Downy mildew (OS)
Uncinula necator (Schw.) Burr.—Powdery mildew (Ohio J. Sci. 66:570)

Addenda

ACERACEAE

Acer saccharum Marsh. Sugar maple

PARASITIC SEED PLANT

Phoradendron flavescens (Pursh) Nutt.—Mistletoe (Braun, E. L. 1961. The woody Plants of Ohio. OSU Press. 362 p.)

ANACARDIACEAE

Rhus aromatica Ait. Fragrant sumac

FUNGI

Oidium sp.—Powdery mildew (CWE)

BALSAMINACEAE

Impatiens pallida Nutt. Pale touch-me-not

FUNGI

Gloeosporium impatientis Anderson (= ? *Colletotrichum* conidial state of *Glomerella cingulata*)—Leaf spot (CWE)

CORNACEAE

Cornus florida L. Flowering dogwood

FUNGI

Discula sp.—Leaf and twig blight; canker (NJT, C) Plant Dis. 72:199

FAGACEAE

Quercus alba L. White oak

FUNGI

Dothiorella sp.—On stems, ? dieback (NJT, C)

GERANIACEAE

Pelargonium x hortorum Bailey. Florist's geranium

VIRUSES

Pelargonium flower break virus—Mosaic (STN) CMI/AAB 130
Tobacco mosaic virus—Mosaic (STN) CMI/AAB No. 151
Tobacco ringspot virus—Ringspot (STN) CMI/AAB No. 17

GRAMINEAE (POACEAE)

Poa pratensis L. Kentucky blue grass

FUNGI

Leptosphaeria korrae Walker & Smith—Necrotic ring spot. Isolated

from several home lawns, central Ohio (WWS) Worf, G.L., J.S. Stewart, and R.C. Avenius. Plant Dis. 70:453 (1986)

Poa annua L. Annual bluegrass

FUNGI

Magnaporthe poae Landschoot & Jackson (Imp. St. *Phialophora* sp.)—Summer patch (WWS). Isolated from diseased tissue, golf course putting greens. Perfect state induced by pairing with known isolate. Landschoot P.J. and N. Jackson. Mycological Research 93:59 (1989)

HAMAMELIDACEAE

Liquidambar styraciflua L. Sweet gum

FUNGI

Cercospora liquidambaris Cke. & Ellis—Leaf spot (NJT, CWE, C)

ONAGRACEAE

Oenothera tetragona Roth

FUNGI

Gloeosporium sp.—Leaf spot (CWE)

ROSACEAE

Malus sp. (cv. Snowdrift) Crabapple

FUNGI

Xylaria polymorpha (Pers.) Grev.—Decline (NJT, CWE, C) CMI 355

Potentilla tabernaemontani Asch.

FUNGI

Phragmidium sp. (?)—Rust (CWE)

Prunus serotina Ehrh. Black cherry

FUNGI

Phloeosporrella padi (Lib.) Arx (Perf. St. *Blumeriella jaapii*)—Leaf spot (CWE) See Sutton 1980, and Arx, Phytopathol. Z. 42:161 for recent changes in nomenclature)

PARASITIC SEED PLANT

Phoradendron flavescens (Pursh) Nutt.—Mistletoe (Braun, E.L. 1961. The Woody Plants of Ohio. OSU Press. 362 p.)

ULMACEAE

Ulmus americana L. American elm

PARASITIC SEED PLANT

Phoradendron flavescens (Pursh) Nutt.—Mistletoe (Ibid.)

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Crataegus calopendron
60
Crataegus crus-galli 60
Crataegus laevigata 60
Cydonia oblonga 61
Malus sylvestris 63
Prunus cerasifera 64
Prunus cerasus 64
Prunus domestica 64
Prunus virginiana 65
Spiraea tomentosa 67
Podosphaera leucotricha
Malus baccata 62
Malus floribunda 62
Malus soulardii 62
Malus sylvestris 63
Podosphaera sp.
Malus pumila 62
Malus tschonoskii 63
Polymyxa graminis
Triticum aestivum 37

- Polyporus abietinus*
Tsuga canadensis 55
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Carya sp. 40
Catalpa speciosa 7
Quercus coccinea 27
Quercus velutina 29
Polyporus berkeleyi
Quercus sp. 27
Polyporus betulinus
Betula 6
Polyporus compactus
Quercus alba 27
Quercus coccinea 27
Quercus prinus 28
Quercus rubra 28
Quercus velutina 29
Polyporus conchifer
Ulmus americana 74
Polyporus curtisii
Ulmus americana 74
Polyporus delectans
Acer rubrum 1
Carya sp. 40
Nyssa sylvatica 51
Polyporus dryadeus
Liquidambar styraciflua
39
Quercus rubra 28
Polyporus dryophilus
Fagus grandifolia 26
Quercus prinus 28
Quercus sp. 27
Quercus stellata 29
Polyporus frondosus
Quercus alba 27
Quercus coccinea 27
Ulmus americana 74
Polyporus glomeratus
Acer rubrum 1
Acer saccharum 2
Polyporus graveolens
Fagus grandifolia 26
Quercus coccinea 27
Quercus rubra 28
Quercus velutina 29
Polyporus hirsutus
Catalpa speciosa 7
Polyporus robiniophilus
Celtis occidentalis 74
Robinia pseudo-acacia 46
Polyporus schweinitzii
Pinus banksiana 53
Pinus strobus 54
Pinus thunbergii 54
Polyporus spp.
Castanea dentata 26
Fraxinus sp. 51
Polyporus spraguei
Fagus grandifolia 26
Quercus coccinea 28
Quercus velutina 29
Polyporus spumeus
Ulmus americana 74
Polyporus squamosus
Acer saccharum 2
Ulmus americana 74
Polyporus sulfureus
Acer rubrum 1
Acer saccharum 2
Juglans nigra 40
Quercus alba 27
Quercus coccinea 27
Robinia pseudo-acacia
46
Polyporus tulipiferae
Acer rubrum 1
Laburnum x watereri
44
Polyporus versicolor
Catalpa bignonioides 7
Quercus alba 27
Quercus coccinea 27
Quercus rubra 28
Polythrincium
Trifolium hybridum 46
Trifolium pratense 46
Trifolium repens 46
Poria andersonii
Carya laciniosa 40
Carya ovata 40
Carya sp. 40
Quercus alba 27
Quercus coccinea 28
Quercus prinus 28
Quercus velutina 29
Poria cocos
Carya sp. 40
Quercus alba 27
Quercus prinus 28
Quercus rubra 28
Quercus velutina 29
Poria fraxinophila
Fraxinus americana 51
Poria nigra
Quercus velutina 29
Poria oleracea
Quercus coccinea 28
Quercus rubra 28
Poria spp. 6
Betula 6
Poria tsugina
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Solanum tuberosum 73
Pratylenchus crenatus
Solanum tuberosum 73
Zea mays 38
Pratylenchus hexincisus
Zea mays 38
Pratylenchus neglectus
Solanum tuberosum 73
Pratylenchus penetrans
Daucus carota 75
Fragaria x ananassa 61
Glycine max 44
Malus sylvestris 63
Rhamnus frangula 59
Rosa spp. 66
Solanum tuberosum 73
Sorghum bicolor 36
Vaccinium corymbosum 25
Zea mays 38
Pratylenchus pratensis
Narcissus 3
Triticum aestivum 37
Pratylenchus scribneri
Solanum tuberosum 73
Zea mays 38
Pratylenchus sp.
Prunus cerasus 64
Viburnum wrightii 9
Pratylenchus thornei
Solanum tuberosum 73
Pratylenchus vulnus
Malus sylvestris 63
Pseudomonas andropogonis
Dianthus caryophyllus 9
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Sorghum halepense 36
Sorghum vulgare 36
Trifolium pratense 46
Zea mays 37
Zea mays var. *rugosa* 38
Pseudomonas angulata
Nicotiana tabacum 72
Pseudomonas asplenii
Asplenium nidus 57
Pseudomonas cannae
Canna x generalis 8
Pseudomonas caryophylli
Dianthus caryophyllus 9
Pseudomonas cattleyae
Phalaenopsis sp. 52
Pseudomonas gladioli
Gladiolus x hortulans 39
Pseudomonas marginata
Gladiolus x hortulans 39
Pseudomonas rhizoctonia
Lactuca sativa 15
Pseudomonas solanacearum
Dahlia sp. 14
Lycopersicon esculentum
71
Nicotiana tabacum 72
Solanum tuberosum 73
Pseudomonas sp.
Magnolia quinquepeta 49
Magnolia stellata 49
Magnolia x loebneri 49
Magnolia x soulangiana 49
Matthiola incana 20
Tagetes sp. 17
Viburnum x pragense 9
Pseudomonas syringae
Begonia thunbergii 6
Berberis x mentorensis 6
Beta vulgaris 10
Delphinium spp. 58
Forsythia x intermedia 51
Helianthus annuus 14
Philadelphus coronarius
69
Prunus avium 64
Pyrus communis 65
Syringa vulgaris 51
Viburnum opulus 9
Viburnum x burkwoodii 8
Viburnum x juddii 9
Zea mays 37
Pseudomonas syringae pv.
apii
Apium graveolens 75
Pseudomonas syringae pv.
atrofaciens
Triticum aestivum 36
Pseudomonas syringae pv.
coronafaciens
Avena sativa 31
Bromus inermis 32
Pseudomonas syringae pv.
glycinea
Glycine max 43
Pseudomonas syringae pv.
lachrymans
Cucumis sativus 21
Pseudomonas syringae pv.
mori
Morus alba 50
Pseudomonas syringae pv.
papulans
Malus sylvestris 63
Pseudomonas syringae pv.
phaseolicola
Phaseolus vulgaris 45
Vigna radiata 46
Pseudomonas syringae pv.
pisi
Pisum sativum 45
Pseudomonas syringae pv.
striafaciens
Avena sativa 31
Pseudomonas syringae pv.
syringae
Trifolium pratense 46
Trifolium repens 46
Pseudomonas syringae pv.
tabaci
Glycine max 43
Nicotiana tabacum 72
Pseudomonas syringae pv.
tomato
Lycopersicon esculentum
71
Pseudomonas woodsii
Dianthus caryophyllus 9
Pseudonectria pachysandri-
cola
Pachysandra terminalis 7

- Pseudonectria rousseliana*
Buxus sempervirens 7
Pseudoperonospora cubensis
Bryonopsis laciniosa 21
Citrullus lanatus 21
Coccinea sp. 21
Cucumis anguria 21
Cucumis melo 21
Cucumis sativus 22
Cucurbita pepo 22
Echinocystis lobata 22
Lagenaria siceraria 22
Luffa acutangula 22
Melothria scabra 22
Momordica balsamina 22
Momordica charantia 22
Sechium edule 22
Sicyos angulatus 22
Trichosanthes anguina 22
Pseudoperonospora humuli
Humulus 8
Pseudopeziza jonesii
Medicago sativa 45
Pseudopeziza medicaginis
Medicago sativa 45
Pseudopeziza ribis
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Pseudopeziza trifolii
Trifolium pratense 46
Pseudoplea briosiana
Medicago sativa 45
Puccinia andropogonis
Andropogon scoparius 31
Polygala senega 56
Comandra umbellata 68
Puccinia anemones-virginianae
Anemone virginiana 58
Puccinia angustata
Eriophorum sp. 24
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Lycopus americanus 41
Scirpus atrovirens 24
Scirpus cyperinus 24
Scirpus fluviatilis 24
Puccinia antirrhini
Antirrhinum majus 70
Puccinia argentata
Impatiens argentata 5
Puccinia asparagi
Allium cepa 47
Asparagus officinalis 47
Puccinia asteris
Aster cordifolius 11
Aster macrophyllus 11
Aster novae-angliae 12
Aster simplex 12
Puccinia bolleyana
Carex comosa 23
Carex frankii 23
Carex lupulina 23
Carex lurida 23
Carex trichocarpa 23
Sambucus canadensis 8
Puccinia brachypodii
Poa compressa 35
Poa pratensis 35
Puccinia calcitrapae
Arctium lappa 11
Arctium minus 11
Puccinia canaliculata
Cyperus esculentus 24
Cyperus strigosus 24
Puccinia caricina
Carex emoryi 23
Carex hirtifolia 23
Carex lacustris 23
Carex limosa 23
Carex squarrosa 23
Carex torta 23
Carex virescens 23
Ribes americanum 69
Ribes cynosbati 69
Urtica dioica 76
Puccinia chrysanthemi
Chrysanthemum x morifolium 13
Puccinia circaea
Circaea quadrifida 51
Puccinia cnici-oleracei
Aster cordifolius 11
Aster ericoides 11
Aster macrophyllus 11
Aster novae-angliae 12
Aster prenanthoides 12
Aster simplex 12
Aster tradescantii 12
Puccinia conoclinii
Ageratum houstonianum 11
Puccinia convolvuli
Convolvulus sepium 17
Puccinia coronata
Avena sativa 32
Dactylis glomerata 32
Festuca elatior 33
Lolium perenne 34
Rhamnus alnifolia 59
Rhamnus cathartica 59
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Puccinia cyperi
Cyperus strigosus 24
Erigeron annuus 14
Erigeron strigosus 14
Puccinia dayi
Lysimachia ciliata 57
Puccinia difformis
Galium aparine 67
Puccinia dioicae
Aster cordifolius 11
Aster macrophyllus 11
Aster sagittifolius 12
Aster shortii 12
Aster simplex 12
Aster tradescantii 12
Carex scoparia 23
Carex stipata 23
Carex trichocarpa 23
Carex vulpinoidea 23
Erigeron annuus 14
Erigeron canadensis 14
Erigeron philadelphicus 14
Erigeron pulchellus 14
Euthamia graminifolia 14
Krigia virginica 15
Oenothera biennis 52
Solidago caesia 16
Solidago canadensis 16
Solidago flexicaulis 16
Solidago rigida 17
Puccinia dispersa
Secale cereale 35
Puccinia eatoniae
Ranunculus abortivus 59
Sphenopholis intermedia 36
Puccinia eleocharidis
Eleocharis sp. 24
Eupatorium perfoliatum 14
Puccinia emaculata
Panicum capillare 34
Puccinia erigeniae
Erigenia bulbosa 75
Puccinia extensicola (See *P. dioicae*)
Aster cordifolius 11
Puccinia extensicola var. *hydnoidea*
Dirca palustris 74
Puccinia fraseri
Hieracium venosum 15
Puccinia gentianae
Gentiana andrewsii 29
Puccinia glumarum
Triticum aestivum 37
Puccinia graminis
Agropyron repens 30
Agrostis alba 30
Avena sativa 32
Berberis vulgaris 6
Bromus secalinus 32
Calamagrostis canadensis 32
Cinna arundinacea 32
Dactylis glomerata 32
Elymus virginicus 33
Hordeum jubatum 33
Hordeum vulgare 34
Phleum pratense 35
Poa compressa 35
Poa pratensis 35
Secale cereale 35
Triticum aestivum 37
Triticum spelta 37
Puccinia helianthi
Helianthus annuus 15
Helianthus decapetalus 15
Helianthus divaricatus 15
Helianthus giganteus 15
Helianthus grosseserratus 15
Helianthus hirsutus 15
Helianthus mollis 15
Helianthus strumosus 15
Helianthus tuberosus 15
Puccinia heterospora
Sida spinosa 50
Puccinia heucherae
Heuchera americana 69
Mitella diphylla 69
Saxifraga virginiana 70
Tiarella cordifolia 70
Puccinia hieracii
Taraxacum erythrospermum 17
Taraxacum officinale 17
Puccinia hordei
Hordeum vulgare 34
Puccinia hyssopi
Agastache nepetoides 41
Puccinia investita
Gnaphalium obtusifolium 14
Puccinia iridis
Iris dichotoma 39
Iris fulva 39
Iris sibirica 40
Puccinia jussiaeae
Ludwigia palustris 52
Puccinia kuhniae
Kuhnia eupatorioides 15
Puccinia lateripes
Ruellia strepens 1
Puccinia lobeliae
Lobelia siphilitica 49
Puccinia longipes
Vernonia fasciculata 17
Puccinia malvacearum
Alcea rosea 50
Malva neglecta 50
Puccinia mariae-wilsoni
Claytonia virginica 57
Puccinia marylandica
Sanicula sp. 76
Puccinia melampodii
Calendula officinalis 12
Puccinia menthae
Blephilia ciliata 41
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Cunila origanoides 41
Mentha arvensis 41
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Monarda clinopodia 41
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Origanum sp. 41
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Lactuca biennis 15
Puccinia minutissima
Decodon verticillatus 49
Puccinia obscura
Luzula campestris 40
Puccinia orbicula
Prenanthes altissima 16
Puccinia panici
Euphorbia corollata 26
Panicum virgatum 34
Puccinia pelargonii-zonalis
Pelargonium x hortorum 30
Puccinia phragmitis
Phragmites communis 35
Puccinia physostegiae
Physostegia virginiana 41
Puccinia pimpinellae
Chaerophyllum procumbens
75
Osmorhiza claytoni 75
Osmorhiza longistylis 75
Puccinia podophylli
Podophyllum peltatum 6
Puccinia polemonii
Polemonium reptans 56
Puccinia polygoni-amphibii
Geranium maculatum 29
Polygonum amphibium 56
Polygonum coccineum 56
Polygonum convolvulus 56
Polygonum lapathifolium 56
Polygonum punctatum 56
Polygonum scandens 56
Tovara virginiana 57
Puccinia polysora
Zea mays 38
Puccinia punctata
Galium aparine 67
Galium concinnum 67
Galium mollugo 67
Puccinia punctiformis
Cirsium arvense 13
Puccinia purpurea
Sorghum bicolor 36
Puccinia recondita
Actaea pachypoda 58
Agropyron repens 30
Agrostis alba 30
Agrostis hyemalis 31
Agrostis perennans 31
Bromus purgans 32
Cimicifuga racemosa 58
Clematis virginiana 58
Elymus canadensis 33
Elymus virginicus 33
Hordeum jubatum 33
Hystrix patula 34
Impatiens capensis 5
Impatiens pallida 5
Secale cereale 35
Triticum aestivum 37
Triticum spelta 37
Puccinia ribis
Ribes spp. 69
Puccinia schedonnardi
Hibiscus moscheutos 50
Muhlenbergia mexicana 34
Muhlenbergia schreberi 34
Puccinia sessilis
Iris virginica 40
Polygonatum biflorum 48
Puccinia seymeriae
Seymeria macrophylla 71
Puccinia seymouriana
Spartina pectinata 36
Puccinia silphii
Senecio cruentus 16
Silphium integrifolium 16
Silphium perfoliatum 16
Silphium trifoliatum 16
Puccinia smilacis
Apocynum cannabinum 3
Smilax bona-nox 48
Smilax glauca 48
Smilax rotundifolia 48
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Puccinia sorghi
Oxalis sp. 52
Zea mays 38
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Puccinia sp.
Viola x wittrockiana 77
Puccinia sparganioides
Fraxinus americana 51
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Spartina pectinata 36
Puccinia striiformis
Triticum aestivum 37
Puccinia tanacetii
Chrysanthemum x morifolium 13
Puccinia tenuis
Eupatorium rugosum 14
Puccinia thaliae
Canna x generalis 8
Puccinia triticina
Triticum aestivum 37
Puccinia tumidipes
Lycium halimifolium 71
Puccinia violae
Viola canadensis 76
Viola cucullata 77
Viola hastata 77
Viola incognita 77
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Viola papilionacea 77
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Puccinia windsoriae
Ptelea trifoliata 67
Tridens flavus 36
Puccinia xanthii
Ambrosia trifida 11
Xanthium chinense 17
Xanthium strumarium 17
Pucciniastrum agrimoniae
Agrimonia gyrosepala 60
Agrimonia parviflora 60
Agrimonia pubescens 60
Pucciniastrum americanum
Rubus idaeus 66
Pucciniastrum epilobii
Epilobium glandulosum
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Fuchsia magellanica 51
Pucciniastrum hydrangeae
Hydrangea arborescens
69
Tsuga canadensis 55
Pucciniastrum myrtilli
Rhododendron 25
Pucciniastrum pyrolae
Chimaphila maculata 58
Pucciniastrum vaccinii
Gaylussacia baccata 24
Rhododendron 25
Vaccinium corymbosum 25
Pyrenochaete terrestris
Allium cepa 47
Zea mays 38
Pyrenophora (See Drechslera)
Bromus inermis 32
Hordeum vulgare 34
Pyrenophora avenae (See Drechslera)
Arrhenatherum elatius 31
Avena sativa 31
Pyrenophora tritici-repentis (See Drechslera)
Triticum aestivum 37
Pyricularia grisea (Magnaporthe)
Digitaria sanguinalis 32
Panicum clandestinum 34
Panicum milliaceum 34
Setaria italica 36
Setaria viridis 36
Pythium acanthicum
Zea mays 38
Pythium aphanidermatum
Agrostis palustris 31
Agrostis tenuis 31
Capsicum annuum 71
Euphorbia pulcherrima 26
Festuca rubra 33
Lolium perenne 34
Medicago sativa 45
Poa annua 35
Poa pratensis 35
Raphanus sativus 21
Zea mays 38
Pythium arrhenomanes
Zea mays 38
Pythium carolinianum
Rhododendron 25
Pythium debaryanum (not a valid species)
Beta vulgaris 10
Catharanthus roseus 3
Cucumis sativus 22
Lactuca sativa 15
Lycopersicon esculentum
72
Medicago sativa 45
Nicotiana tabacum 72
Phaseolus vulgaris 45
Pinus resinosa 54
Salvia splendens 42
Spinacia oleracea 11
Pythium dissotocum
Glycine max 44
Triticum aestivum 37
Zea mays 38
Pythium graminicola
Agrostis palustris 31
Agrostis tenuis 31
Bromus inermis 32
Dactylis glomerata 32
Festuca rubra 33
Lolium perenne 34
Phleum pratense 35
Poa pratensis 35
Triticum aestivum 37
Zea mays 38
Pythium irregulare
Alcea rosea 50
Daucus carota 75
Glycine max 44
Lactuca sativa 15
Ligustrum sp. 51
Medicago sativa 45
Pelargonium x hortorum
30
Pelargonium peltatum 30
Rhododendron 25
Rosa spp. 66
Taxus x media 73
Triticum aestivum 37
Zea mays 38
Pythium iwayamai
Zea mays 38
Pythium mamillatum
Taxus x media 73
Pythium oligandrum
Glycine max 44
Medicago sativa 45
Pythium paroecandrum
Medicago sativa 45
Zea mays 38
Pythium periplocum
Zea mays 38
Pythium polymastum
Lactuca sativa 15
Pythium rostratum
Medicago sativa 45

- Pythium* sp.
Ageratum houstonianum 11
Begonia x hiemalis 5
Cissus rhombifolia 77
Coleus x hybridus 41
Fragaria x ananassa 61
Fuchsia magellanica 52
Hedera helix 5
Iris laevigata 40
Melilotus alba 45
Portulaca grandiflora 57
Saintpaulia ionantha 30
Schlumbergera truncata 7
Sinningia speciosa 30
Verbena x hybrida 76
Pythium splendens
Kalanchoe blossfeldiana 18
Lilium longiflorum 48
Rhododendron 25
Pythium spp.
Pelargonium x hortorum 30
Pisum sativum 46
Solanum tuberosum 73
Pythium torulosum
Agrostis palustris 31
Poa annua 35
Poa pratensis 35
Triticum aestivum 37
Zea mays 38
Pythium ultimum
Apium graveolens 75
Beta vulgaris 10
Brassica oleracea 19
Capsicum annuum 71
Catharanthus roseus 3
Celosia cristata 3
Chrysanthemum x morifolium 13
Cucumis sativus 22
Daucus carota 75
Dianthus caryophyllus 9
Euphorbia pulcherrima 26
Glycine max 44
Impatiens wallerana 5
Lactuca sativa 15
Lycopersicon esculentum 72
Medicago sativa 45
Nicotiana tabacum 72
Pelargonium x hortorum 30
Phaseolus vulgaris 45
Solanum tuberosum 73
Tagetes sp. 17
Triticum aestivum 37
Vigna radiata 46
Viola x wittrockiana 77
Zea mays 38
Pythium vanterpoolii
Agrostis palustris 31
Poa annua 35
Poa pratensis 35
Pythium vexans
Glycine max 44
Lactuca sativa 15
Pelargonium x hortorum 30
Rhododendron 25
Zea mays 38
Ramularia aequivoca
Ranunculus hispidus 59
Ramularia ajugae
Ajuga reptans 41
Ramularia armoraciae
Armoracia rusticana 19
Ramularia arvensis
Potentilla norvegica 64
Ramularia barbareae
Barbarea vulgaris 19
Ramularia brunellae
Prunella vulgaris 42
Ramularia celastri
Celastrus scandens 10
Ramularia circumfusa
Rumex obtusifolius 57
Ramularia cyclaminicola
Cyclamen persicum 57
Ramularia didyma
Anemone canadensis 58
Ranunculus pennsylvanicus 59
Ranunculus recurvatus 59
Ramularia euonymi
Euonymus atropurpurea 10
Ramularia geranii
Geranium maculatum 29
Ramularia heraclei
Heracleum maximum 75
Ramularia macrospora
Erigeron annuus 14
Ramularia menthicola
Mentha spicata 41
Ramularia mimuli
Mimulus ringens 70
Ramularia mitellae
Mitella diphylla 69
Ramularia pastinacae
Pastinaca sativa 76
Ramularia plantaginis
Plantago major 55
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Ramularia ranunculi
Ranunculus recurvatus 59
Ramularia rubella
Rumex crispus 57
Rumex obtusifolius 57
Ramularia rufomaculans
Fagopyrum esculentum 56
Ramularia sp.
Panax quinquefolius 5
Ramularia subsanguinea
Maianthemum canadense 48
Ramularia taraxaci
Taraxacum officinale 17
Ramularia tulasnei
Fragaria x ananassa 61
Ramularia urticae
Urtica dioica 76
Ramularia variabilis
Verbascum thapsus 71
Ramularia veronicae
Veronica peregrina 71
Veronica serpyllifolia 71
Veronica spicata 71
Ramularia viburni
Viburnum lentago 9
Ravenelia cassiaeicola
Cassia fasciculata 43
Ravenelia epiphylla
Tephrosia virginiana 46
Rhabdospora kellermani
Mimulus ringens 70
Rhizoctonia cerealis
Agrostis palustris 31
Poa annua 35
Poa pratensis 35
Triticum aestivum 37
Rhizoctonia crocorum
Beta vulgaris 10
Rhizoctonia leguminicola
Trifolium pratense 46
Rhizoctonia solani
Abutilon theophrasti 50
Achillea millefolium 11
Agrostis alba 31
Agrostis palustris 31
Agrostis tenuis 31
Allium cepa 47
Amaranthus retroflexus 2
Ambrosia artemisiifolia 11
Ambrosia trifida 11
Antirrhinum majus 70
Apium graveolens 75
Asclepias syriaca 5
Begonia x semperflorens-cultorum 6
Beta vulgaris 10
Brassica oleracea 19
Brassica rapa 20
Callistephus chinensis 12
Campanula 7
Capsicum annuum 71
Catharanthus roseus 3
Celosia cristata 3
Centaurea cineraria 12
Chenopodium album 11
Chrysanthemum x morifolium 13
Cichorium endiva 13
Cirsium vulgare 13
Cucumis melo 21
Cucumis sativus 22
Cyperus esculentus 24
Daucus carota 75
Dianthus barbatus 9
Dianthus caryophyllus 9
Dicentra spectabilis 29
Digitaria sanguinalis 32
Echinochloa crusgalli 33
Epipremnum aureum 4
Euphorbia pulcherrima 26
Festuca elatior 33
Festuca ovina 33
Festuca rubra 33
Ficus elastica 50
Fittonia verschaffeltii 1
Fragaria x ananassa 61
Fuchsia magellanica 52
Glechoma hederacea 41
Glycine max 44
Gomphrena globosa 3
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